

The University of Maine

DigitalCommons@UMaine

General University of Maine Publications

University of Maine Publications

9-23-1996

Maine Perspective, v 8, i 2

Department of Public Affairs, University of Maine

Follow this and additional works at: https://digitalcommons.library.umaine.edu/univ_publications

Repository Citation

Department of Public Affairs, University of Maine, "Maine Perspective, v 8, i 2" (1996). *General University of Maine Publications*. 1474.

https://digitalcommons.library.umaine.edu/univ_publications/1474

This Newsletter is brought to you for free and open access by DigitalCommons@UMaine. It has been accepted for inclusion in General University of Maine Publications by an authorized administrator of DigitalCommons@UMaine. For more information, please contact um.library.technical.services@maine.edu.

Maine Perspective

A PUBLICATION
FOR THE
UNIVERSITY OF
MAINE

VOL. 8, NO. 2
SEPTEMBER 23, 1996

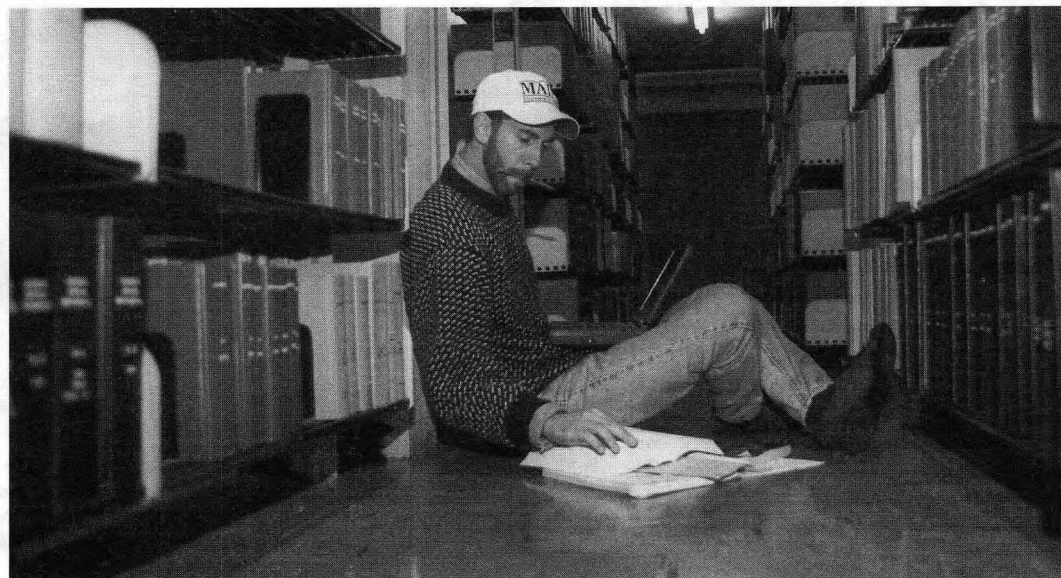


Photo by Monty Rand

UMaine a Leader in the Integration and Application of Information Technology in the State

Throughout Maine and across the country, goals and strategies for the 21st century include the integration of information technology. But for many people, information technology is already changing the way they do business – and live their lives.

For some, gaining access to the Internet is the primary technological goal, while for others, information technology translates further into the management and use of information, and development of new applications and expertise. In such areas as economic development, resource management, healthcare, education and government, information technology is having an impact, and playing an ever-important role.

The University and the University of Maine System have a leadership role to play in the evolution of telecommunications in Maine.

"The future is now," says Dan Dwyer, interim vice provost for research at the University of Maine. "We are all connected and interconnected. With rapid movement of information and ideas across the Internet, researchers are sharing data and information in almost real time. There are enormous educational applications of the technology both in classroom and distance education. With the evolution of new software systems, more and more people can have access to remote imaging data and other geographic information.

"Schools are being hard-wired and need to know how to access and use information. Business in Maine has to have the same access to the information superhighway as all industries in the country

are going to have. The University and the University of Maine System have a leadership role to play in the evolution of telecommunications in Maine. We have the expertise and knowledge to show the way and help meet the needs of the state, whether in the management of natural resources, municipal planning or economic development. The University of Maine has a broad range of diverse activities across campus in information systems – from our library information systems to researchers using the latest in satellite imaging and educators applying the technology in the classroom. It is an area that is evolving and growing, and we're already there, on the cutting edge, in so many areas."

With its depth of research and education initiatives, the University of Maine is at the forefront of technology in Maine, making it a unique resource in the state, according to Brenda Cook, director of corporate relations for University Development and coordinator of UMaine's Corporate Affiliate Program. The challenge is to bring this and other resources in the state to bear on the critical issues that will move Maine forward. Coupled with the rate of change in the technology, it is more

continued on page 16

In Perspective

- 2 School of Marine Sciences
- 2 UMaineNet
- 8 In Focus: Maine's "Sensor Valley"
- 9 URSUS Upgrade

As a service to the University community, costs of producing Maine Perspective are underwritten by University Printing Services.

School of Marine Sciences Begins Its First Year

UMaine's School of Marine Sciences is taking shape with a growing core of staff and faculty and a fast-tracked curriculum planning process aimed at matriculating an inaugural class of undergraduate marine sciences majors in September 1997.

During the summer months, committees have been meeting to identify core courses for all marine science undergrads, as well as the select courses for biological, physical and chemical tracks. Although final decisions have not been made on either the number of tracks or specific courses, committee members hope to have a program proposal on the table at the Board of Trustees meeting in January, according to Bruce Sidell, director of the school.

Sidell has also been meeting with representatives of other marine organizations — Maine Maritime Academy, Bigelow Laboratory, Maine Department of Marine Resources — to inform them of UMaine's progress and lay the groundwork for future cooperation. The school will be responsive to the state's marine interests, Sidell emphasizes.

"There's a very big community out there that is tied to marine resources. If we can open up what the University has to offer to them, that's a step in the right direction. What we want to work for are win-win relationships for everybody. We don't have the resources for anything less than that," adds Sidell.

continued on page 13

UMaineNet Gets More Residential Students Online

In residence halls across campus this month, computer technicians have been making house calls to install network cards that allow more UMaine students than ever before to get online. By the second week in October, it is estimated that more than 600 of the University's residential students will be surfing the Internet, logging into another computer from their computer via Telnet, and communicating electronically with the help of the University's FirstClass Computer Conferencing System.

"This is a state-of-the-art, comprehensive network we're installing on an ATM (Asynchronous Transmission Mode)-based system," says Tom Byther, interim director of UMaine Instructional Technologies. "At a cost of \$50 for the network card and \$50 a year for the registration, we're trying to make it easy — and affordable — for students to connect to the network."

Establishment of UMaineNet resulted from major funding from the Academic Computing and Advisory Committee, which

continued on page 14

A REMINDER

Maine Perspective is now a biweekly publication. The publication schedule for the academic year is:

Issue date	Deadline for copy
October 7	September 27
October 21	October 11
November 4	October 25
November 18	November 8
December 2	November 22

Members of the University community with news and information for inclusion in *Maine Perspective* are advised to submit items as early as possible prior to the desired publication date.



A delegation of 37 visitors from Japan's Aomori Prefecture were on campus earlier this month as part of a statewide tour coordinated by the Maine International Trade Center. The University of Maine was a stop on the tour requested by members of the delegation that included representatives from Hirosaki University who are interested in exploring the possibilities of faculty, student and information exchanges with UMaine. Hirosaki is a comprehensive university with 6,000 students and affiliation to a medical school. Details are now being worked out for a formal agreement between the two institutions that could be in place as early as the end of this academic year. It would be the third such exchange agreement the University has in Japan; presently exchanges are taking place with Tezukayama University and the Kyushu Institute of Technology. While on campus, the Japanese delegation toured UMaine facilities and met with members of the University community, including those with ties to Japan. Meeting with President Fred Hutchinson and Karen Boucias, director of the UMaine Office of International Programs, is, left to right, Morio Kimura, governor of Aomori Prefecture, and Yutaka Yoshida, president of Hirosaki University.

ELIZABETH NOYCE REMEMBERED

The University of Maine community lost one of its most generous advocates recently with the death of philanthropist Elizabeth "Betty" Noyce of Bremen on Sept. 17.

"Betty wasn't born in Maine, but she certainly possessed many of the best traits of Maine people — generosity, loyalty, concern for others, citizenship, humility, and a love of the land and the sea," says UMaine President Fred Hutchinson.

Hutchinson says that while many people think of Noyce's many investments in downtown Portland and her contributions to Maine Medical Center as her most notable achievements, her interest in the state was not at all regional. *continued on page 15*

Maine Perspective

Maine Perspective is published by the Department of Public Affairs
University of Maine • 5761 Howard A. Keyo Public Affairs Building
Orono, Maine 04469-5761 • 207/581-3745

Director of Public Affairs John Diamond • Executive Editor Margaret Nagle

Layout and Design by University of Maine Department of Public Affairs
Printed by University of Maine Printing Services

In complying with the letter and spirit of applicable laws and in pursuing its own goals of pluralism, the University of Maine shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, national origin or citizenship status, age, disability or veterans status in employment, education, and all other areas of the University. The University provides reasonable accommodations to qualified individuals with disabilities upon request.

University of
Maine

UMaine Calendar

SEPT. 23 – OCT. 8

All events are free and open to the public unless otherwise specified. Any speaker not otherwise identified is a member of the University of Maine faculty, staff or student body. Send notices of upcoming campus events to: *Maine Perspective* Calendar, Public Affairs. Calendar of events listings MUST be typewritten and should be sent AT LEAST TWO WEEKS in advance. Deadline for each issue: 9 a.m. Friday. For more information, call x3745.

23 Monday

Do-It-Yourself Database Searching Workshop, focusing on science and engineering databases, 9:30-10:45 a.m., Sept. 23, Science and Engineering Center Office, Fogler Library. Free/preregistration required. x1679 or ncourtis@maine

Job Search Workshop: Networking for Jobs, offered by the Career Center, 3:10 p.m., Sept. 23, third floor, Chadbourne Hall. x1359.

"Launch Your Career," orientation session for seniors and final-year graduate students in the College of Arts and Humanities, and the College of Social and Behavioral Sciences, offered by the Career Center, 6 p.m., Sept. 23, 100 Corbett Business Building. x1359.

24 Tuesday

"What's New in the EU? A Danish Perspective on Women's Issues in the European Union," by Fulbright Scholar Nina Nørgard, part of the Women in the Curriculum Lunch Series, 12:15 p.m., Sept. 24, Bangor Lounge, Union. x1228.

Coffee House with John McCormick, offered by the Center for Students and Community Life, 8 p.m., Sept. 24, Peabody Lounge, Union. x1734.

Do-It-Yourself Database Searching Workshop for humanities and social sciences faculty, staff and students, 8:30-10 a.m., Sept. 24, Fogler Library. Registration required. x3611 or christin@maine

Welcome Back and Get-to-Know-You Potluck, offered by Women of the World, noon, Sept. 24, Church of Universal Fellowship. Bring a dish to pass and \$1. x2905.

Job Search Workshop: Writing Effective Cover Letters, offered by the Career Center, 2:10 p.m., Sept. 24, third floor, Chadbourne Hall. x1359.

25 Wednesday

"Scams - Yikes! Credit Cards, Loans, Repossessions, Rent-to-Own: How to Protect Yourself from Being a Victim," a consumer forum offered by Curtis & Griffin legal services featuring William Lund of Maine's Office of Consumer Credit Regulation and attorneys Ted Curtis and Brian Molloy, noon, Sept. 25, Bangor Lounge, Union. x1789.

Faculty Senate Meeting, 3:15 p.m., Sept. 25, Lown Rooms, Union. x1167.

26 Thursday

The Professional Employees Advisory Council (PEAC) will hold its annual Welcome/welcome back brown bag lunch in the FFA room, Union, Thursday, Sept. 26, noon-1 pm. President Hutchinson will join us. The lunch is open to all professional employees, and we want to extend a special welcome to new employees. Bring your lunch; dessert and beverage will be served. For more information, call Carol Giesecke, x3193.

"Child Health Care in Cuba: Effects of the U.S. Embargo on Health Care," by Dr. Tom Whitney, part of the Socialist & Marxist Studies Luncheon Series, 12:30 p.m., Sept. 26, Bangor Lounge, Union. x1734.

"Launch Your Career," orientation session for seniors and final-year graduate students in the College of Natural Resources, Forestry and Agriculture, offered by the Career Center, 6 p.m., Sept. 26, 100 Corbett Business Building. x1359.

Thursday Night at the Bear's Den with Gumshoe, offered by the Center for Students and Community Life, 9 p.m., Sept. 26, Union. x1734.

27 Friday

Open Classroom Day, part of Family and Friends Weekend, 8 a.m.-5:30 p.m., Sept. 27. x1792.

Intro to Windows, an Instructional Technology Windows Workshop, 10 a.m.-noon, Sept. 27, 111 Corbett Business Building. Registration/fee. x1638.

Performance by the John Cooper Trio, part of the TGIF Jazz series, offered by the Union Board: Diversions, 12:15 p.m., Sept. 27, Union Patio (Bangor Lounge in case of rain). x1734.

Aquaculture at UMaine Tour, part of Family and Friends Weekend, 3 p.m., Sept. 27, FARG Building. x1792.

Pulp and Paper Making Demonstration, part of Family and Friends Weekend, 3 p.m., Sept. 27, Jenness Hall. x1792.

"Blood Substitutes Based on Modified Hemoglobin: Physiological and Toxicological Implications," by Abdu Alayash, research scientist, Center for Biologics Evaluation and Research, Federal Drug Administration, offered by the Department of Zoology, 3:10 p.m., Sept. 27, 300 Murray Hall.

Movie: The Truth About Cats and Dogs, part of Family and Friends Weekend, offered by the Center for Students and Community Life, 6:30 p.m. and 9:15 p.m., Sept. 27. Admission fee. x1792.

Sacred Music Concert, part of the celebration of the 25th anniversary of the dedication of the Newman Center and the 50th anniversary of the Newman-UMaine Chaplaincy, 7 p.m., Sept. 27, Newman Center. 866-2155.

28 Saturday

ACE Reception, part of Family and Friends Weekend, 9 a.m., Sept. 28, Bangor Lounges, Union. x1792.

Fraternity/Sorority Discovery Day, part of Family and Friends Weekend, 9:30-11 a.m., Sept. 28, Totman Lounge, Union. x1792.

Organizational Fair, part of Family and Friends Weekend, offered by the Center for Students and Community Life, 10 a.m.-1 p.m., Sept. 28, Mall. x1792.

"Materials for the 21st Century," offered by LASST as part of Family and Friends Weekend, 10 a.m.-1 p.m., Sept. 28, Mall. x1792.

Women's Cross Country: UMaine vs. Northeastern University, 10:30 a.m., Sept. 28. xBEAR.

Public Swimming, part of Family and Friends Weekend, 10:30 a.m.-noon, Sept. 28, Wallace Pool. Admission fee.

Men's Soccer: UMaine vs. Boston University, 11 a.m., Sept. 28. xBEAR.

Open House at Roger Clapp Greenhouse, part of Family and Friends Weekend, 11 a.m., Sept. 28.

University of Maine Bookstore Annual Fashion Show on the Mall, part of Family and Friends Weekend, 11 a.m., Sept. 28. x1792.

Black Bear Pancake Tasting, offered by Page Farm and Home Museum, noon-1 p.m., Sept. 28, Page Museum. x4100.

Family and Friends Weekend Lobster/Steak Feast, 11 a.m.-12:15 p.m., Sept. 28. Advanced registration. x1792.

Field Hockey: UMaine vs. Providence College, noon, Sept. 28, Lengyel Gym Field. xBEAR.

Cardboard Canoe Race on the Stillwater River, offered by the UMaine Chapter of the American Society of Mechanical Engineering Students, part of Family and Friends Weekend, noon, Sept. 28, Stillwater off Steam Plant Parking Lot. x1792.

Ongoing Events

Academic Activities/Events

Family and Friends Weekend, Sept. 27-29.

College Fair, Sept. 30-Oct. 1.

Homecoming, Oct. 18-20.

Conferences/Seminars/Workshops

Introduction to URSUS, a Fogler Library Internet workshop, 1-2:30 p.m., Sept. 30; 6-7:30 p.m., Oct. 8, Fogler Computer Classroom. Preregistration. x1678 or <http://libinfo.ume.maine.edu/Classes/fall1996.html>

Job Search Workshop: Resume Writing Basics, offered by the Career Center, 1:10 p.m., Sept. 23; 2:10 p.m., Sept. 26, third floor, Chadbourne Hall. x1359.

Engineering Information/EI Village Tour, a Fogler Library Internet workshop, 1-2:30 p.m., Sept. 25; 10:30 a.m.-noon, Oct. 7, Fogler Computer Classroom. Preregistration. x1678 or <http://libinfo.ume.maine.edu/Classes/fall1996.html>

Job Search Workshop: Interviewing Techniques, offered by the Career Center, 3:10 p.m., Sept. 24; 3:10 p.m., Sept. 25, third floor, Chadbourne Hall. x1359.

Job Search Workshop: Electronic Job Search, offered by the Career Center, 8 a.m., Sept. 24; 11 a.m., Oct. 16, 121 Lengyel Computer Cluster. x1359.

Navigating the Internet, a Fogler Library Internet workshop, 10-noon, Sept. 24; 6-8 p.m., Oct. 16; 3-5 p.m., Oct. 21; 10 a.m.-noon, Nov. 21, Fogler Computer Classroom. Preregistration. x1678 or <http://libinfo.ume.maine.edu/Classes/fall1996.html>

Advanced Internet Searching, a Fogler Library Internet workshop, 3-5 p.m., Sept. 26; 10 a.m.-noon, Nov. 1; 10 a.m.-noon, Nov. 11; 3-5 p.m., Dec. 3, Fogler Computer Classroom. Preregistration. x1678 or <http://libinfo.ume.maine.edu/Classes/fall1996.html>

Job Search Workshop: How to Find Internships, offered by the Career Center, 2:10 p.m., Sept. 27 and Oct. 10, third floor, Chadbourne Hall. x1359.

Scholarly Communication on the Internet, a Fogler Library Internet workshop, 1-3 p.m., Oct. 7; 10 a.m.-noon, Nov. 7, Fogler Computer Classroom. Preregistration. x1678 or <http://libinfo.ume.maine.edu/Classes/fall1996.html>

Entertainment

"Our Place in Space," a Planetarium Show, 7 p.m., Sept. 27-28; also 3 p.m., Sept. 28, Wingate Hall. Admission fee. x1341.

Jordan Observatory Viewing, 8-10 p.m., Sept. 27-28, pending clear skies. x1341.

Exhibits/Demonstrations/Tours

Resistance & Rescue, a University of Maine Museum of Art exhibit, Sept. 27-Dec. 8, Hauck Auditorium Gallery. x3255.

Celebration! Performance Artifacts from Southeast Asia, a Hudson Museum exhibit, opening Oct. 15, Maine Center for the Arts. x1901.

Oaxaca . . . Días de los Muertos, Días de los Vivos, photography by Cy Lehrer, a Hudson Museum exhibit, through Nov. 3. x1901.

Majo Keleshian: The Edge of the Stream, a University of Maine Museum of Art exhibit, through Nov. 9, Carnegie Gallery, Carnegie Hall. x3255.

Wendy Seligman Lewis: Blue Hill Retrospective, a University of Maine Museum of Art exhibit, through Nov. 9, 1938 Gallery, Carnegie Hall. x3255.

Pencil Work: Drawings from the Museum Collection, a University of Maine Museum of Art exhibit, through Nov. 17, Hole in the Wall Gallery, Union. x3255.

Holocaust: The Presence of the Past, a University of Maine Museum of Art exhibit, through Dec. 1, Graphics Gallery, Union. x3255.

Maine Forest and Logging Museum - Leonard's Mills, a water-powered sawmill community site, open daily 9 a.m.-4 p.m., with guided tours available, Bradley. x2871.

University of Maine Museum of Art open Monday-Friday, 9 a.m.-4:30 p.m. x3255.

Page Farm and Home Museum open Tuesday-Saturday, 9 a.m.-4 p.m. x4100.

Hudson Museum open Tuesday-Friday, 9 a.m.-4 p.m.; Saturday-Sunday, 11 a.m.-4 p.m. x1901.

Lyle E. Littlefield Trial Ornamental Garden, display of more than 2,000 varieties of landscape plants, Rangeley Road.

Meetings of Groups/Organizations

Foreign Language Tables: Monday - French; Tuesday - Russian; Wednesday - German; Thursday - Spanish, all noon-1 p.m., 207 Little Hall. x2073.

Maine Peace Action Committee, 4 p.m., every Wednesday, Virtue Room, Maples. x3860.

Prisoners of Gender, a discussion group focused the subject of gender, 3 p.m., every Friday, Old Town Room, Union. 827-8118.

International Coffee Hour, 4 p.m., every Friday, Peabody Lounge, Union. x2905.

Miscellaneous

Blood Drive, 10 a.m.-7 p.m., Sept. 23-24, Lown Rooms, Union. x1734.

Antiques, Collectibles and Crafts Show and Sale, part of Family and Friends Weekend, offered by the Center for Students and Community Life, 10 a.m.-5 p.m., Sept. 28-29, Field House and Gym. Admission fee. x1792.

Yoga for Stress Reduction and Fitness, with certified Hatha Yoga instructor Barbara Lyon, offered by EAP, noon-1 p.m., Oct. 4-Dec. 13, Woolley Room, DTAV. Registration/admission fee. x4014.

Football: UMaine vs. University of Delaware, featuring President's Welcome at Halftime, 1 p.m., Sept. 28, Alumni Field. Admission fee. xBEAR.

Barbecue for Newman Center Alumni and Friends, part of the celebration of the 25th anniversary of the dedication of the Newman Center and the 50th anniversary of the Newman-UMaine Chaplaincy, following the football game, Sept. 28, Newman Center. 866-2155.

Public Skating, part of Family and Friends Weekend, 2-3:30 p.m., Sept. 28, Alford Sports Arena. Admission fee. x1792.

Swimming, part of Family and Friends Weekend, 2:30-5 p.m., Sept. 28, Wallace Pool. Admission fee. x1792.

Maine Center for the Arts Gala - A Night in New Orleans, 8 p.m., Sept. 28, Hutchins Concert Hall. Admission fee. x1755.

Performance by Hypnotist Ronny Romm, part of Family and Friends Weekend, offered by the Center for Students and Community Life, 8 p.m., Sept. 28, Hauck Auditorium. Admission fee. x1792.

29 Sunday

Women's Soccer: UMaine vs. Boston University, 2 p.m., Sept. 29, athletic field north of baseball field. xBEAR.

Public Skating, part of Family and Friends Weekend, 2-3:30 p.m., Sept. 29, Alford Sports Arena. Admission fee. x1792.

Swimming, part of Family and Friends Weekend, 2:30-5 p.m., Sept. 29, Wallace Pool. Admission fee. x1792.

Meeting of the Greater Bangor Area NAACP, 7 p.m., Sept. 29, Sutton Lounge, Union.

30 Monday

Anniversary Mass, with principal celebrant Rev. Bishop Michael Cote, part of the celebration of the 25th anniversary of the dedication of the Newman Center and the 50th anniversary of the Newman-UMaine Chaplaincy, 1 p.m., Sept. 30, Newman Center. 866-2155.

1 Tuesday

MS.Word, Intro, an Instructional Technology Mac Workshop, 9-11 a.m., Oct. 1, 111 Corbett Business Building. Registration/ fee. x1638.

Deadline for applications for December graduation, 4:30 p.m., Oct. 1, Student Records, 100 Wingate Hall.

2 Wednesday

"These words mean poetry to me . . ." 10 UMaine faculty and staff members reading their favorite poems, part of the Poetry Free Zone series, noon, Oct. 2, Honors Center. x2072.

"Theater for the 98%: Women's Issues Are Human Issues," a performance with audience participation by People's Theater, directed by Cathy Plourde, part of the Women in the Curriculum Lunch Series, 12:15 p.m., Oct. 2, Bangor Lounge, Union. x1228.

Do-it-Yourself Database Searching Workshop, focusing on science and engineering databases, 3-4:30 p.m., Oct. 2, Fogler Library Classroom. Free/preregistration required. x1678 or mwwhite@ursus3.ursus.maine.edu

3 Thursday

"Time Management," a Study Skills Program by Dwight Rideout, offered by the Center for Students and Community Life, 3:15 p.m., Oct. 3, Totman Lounge, Union.

End of first third of semester for withdrawals, 4:30 p.m., Oct. 3.

Performance by the Jazz-Fusion Trio Medeski Martin and Wood, a concert to benefit the *Prism* year-book, 8 p.m., Oct. 3, Hutchins

Making a Living: The Work Experience of African Americans in New England, an exhibit, readings and video exploring the little-known history of the region's African Americans, is now on display at the Old Town Museum, 1-5 p.m., Wednesday-Sunday, through Oct. 6.

Making a Living is a project of the New England Foundation for the Humanities and the Maine Humanities Council, and is offered in this area by the Greater Bangor Area NAACP.

Concert Hall, Maine Center for the Arts. Admission fee. x1755.

4 Friday

"It's About Time Again: Teaching History in Maine, a daylong conference offered by the History Department and College of Education, featuring a keynote address at 10:15 a.m., by historian William Chafe of Duke University: "From Roosevelt to Clinton: The Changing Nature of the American Presidency," Oct. 4.

MS.Word, Intro, an Instructional Technology Windows Workshop, 10 a.m.-noon, Oct. 4, 111 Corbett Business Building. Registration/fee. x1638.

Do-it-Yourself Database Searching Workshop, focusing on science and engineering databases, 2-3:15 p.m., Oct. 4, Science and Engineering Center Office, Fogler Library. Free/preregistration required. x1679 or ncourtis@maine

"Moving Around in Muscle: Intracellular Diffusion and Mobility of Phosphorous Metabolites," by Timothy Moerland, associate professor, Department of Biological Science, Florida State University, offered by the Department of Zoology and the Migratory Fish Research Institute, 3:10 p.m., Oct. 4, 300 Murray Hall. x2541.

5 Saturday

Discovery Day: Ghostly Faces and Flickering Lights, an adult/child workshop, part of the Hudson Museum Just for Kids series, 10 a.m., Oct. 5, Maine Center for the Arts. Preregistration/admission fee. x1901.

Men's Ice Hockey: Midnight Practice, Oct. 5, Alford Sports Arena. xBEAR.

6 Sunday

Bangor Symphony Orchestra Performance featuring works of

Mendelssohn, Ravel and Beethoven, 3 p.m., Oct. 6, Hutchins Concert Hall, Maine Center for the Arts. Admission fee. 942-5555. Free pre-concert lecture by David Klocko one hour before performance, Bodwell Area.

7 Monday

"The Ecology of the Shallow-water Marine Benthos of Antarctica," by Andrew Clarke, professor and head of marine life sciences, British Antarctic Survey, Cambridge, England, offered by the Department of Zoology, the Migratory Fish Research Institute and School of Marine Sciences, noon, Oct. 7, Murray Hall. x4381.

"Inclusion - No Exceptions, No Excuses: Mental Illness and the Americans with Disabilities Act," by Polly Karris, Ann Smith and John Hanson, part of Mental Illness Awareness Week, 12:15 p.m., Oct. 7, Bangor Lounges, Union. x4194.

Uncover Database, a Fogler Library Internet workshop, 3-4:30 p.m., Oct. 7, Fogler Computer Classroom. Preregistration. x1678 or <http://libinfo.ume.maine.edu/Classes/fall1996.html>

UMaine-UVote Presentation by John Baldacci, candidate for House of Representatives, offered by the Center for Students and Community Life, 3:30 p.m., Oct. 7, Bangor Lounges, Union. x4104.

"The Impact of Climate Change on the Distribution and Evolution of Marine Animals," by Andrew Clarke, professor and head of marine life sciences, British Antarctic Survey, Cambridge, England, offered by the Department of Zoology, the Migratory Fish Research Institute and School of Marine Sciences, 4 p.m., Oct. 7, 107 Corbett Business Building. Reception follows in Atrium. x4381.

"Fact and Myth: The Holocaust, Schindler's List, and the Rescue of Danish Jewry," by Judith Goldstein, executive director of the Thanks to Scandinavia Foundation, New York, offered by the Museum of Art in

conjunction with two exhibits: *Holocaust: The Presence of the Past* (Graphics Gallery); and *Resistance & Rescue: Denmark's Response to the Holocaust* (Hauck Gallery), 6 p.m., Oct. 7, Lown Room, Union. x3255.

"Care-less Society: Implications for Policy in Mental Health," by Pat O'Brien, director of Region 3, Department of Mental Health, Mental Retardation and Substance Abuse Services, the keynote address for Mental Illness Awareness Week, 7 p.m., Oct. 7, 100 Neville Hall. x4194.

8 Tuesday

MS.Word, Intermediate, an Instructional Technology Mac Workshop, 9-11 a.m., Oct. 8, 111 Corbett Business Building. Registration/fee. x1638.

LEARN TO SKATE at the Alford Sports Arena

Classes offered for
▼ school-age children
▼ adults - beginner to advanced
Classes start Oct. 21
For more information,
call 581-1096
Skates available at no charge



University of Maine Corporate Appreciation Breakfast, Sept. 27, Radisson Hotel.

Women's Basketball Golf Tournament Sept. 30, Falmouth.

UMaine Soccer Reception, 2 p.m., Oct. 15.

UMaine Art Department/Museum of Art Celebration, featuring the works of Vincent Hartgen, October-November.

Greater Portland Chamber of Commerce After Hours, 5-7 p.m., Nov. 14.

Cumberland County Alumni Chapter Reception and Symphony Gala, 5-7 p.m., Dec. 14.

Women's Basketball: UMaine vs. Rhode Island, Dec. 22, Cumberland County Civic Center.

Oral Exams

"Isolation, Characterization and Transcriptional Regulation of the *Phytophthora infestans* ypt1 Gene," by Yin Chen, biochemistry, molecular biology and microbiology, 1 p.m., Sept. 30, Staple Conference Room, Hitchner Hall.

People in Perspective

Just in time for the opening of the 10th Anniversary Performance Season of the Maine Center for the Arts, including its Gala Benefit performance this weekend, the Hutchins Concert Hall has a new stage floor that is as much a work of art as any performance offered on it.

The new floor was made possible by the support of a Maine-based forestry company and the expertise of a UMaine associate professor of wood science and technology. It owes its beauty and elegance to the artistic and technical know-how of Maine Center for the Arts' technical director Steve Carignan.

Choreographing all the efforts was UMaine's Facilities Management.

"This is a Maine place, and I'm a true believer in what we do," says Carignan, who has been with the Maine Center for the Arts since it opened, initially as a graduate assistant. "Maine wood in a Maine facility – that's sophistication and a statement of our priorities.

"It's all part of the reason I'm still here."

Replacement of the stage floor made of fir was one of several priorities for the Hutchins Concert Hall after a decade of hard use. Indeed, the need for new flooring was evident four years after the opening of the Maine Center for the Arts, at which time the Hall stage was sanded, repaired and repainted.

"It was becoming dangerous to have dancers on the floor," says Carignan. "The scale of its use, and the times when there are 2-ton objects rolling over it, cause the stage surface to wear and splinter. Acts come in and drill holes in the floor, screw sets down. It all takes its toll."

Earlier this summer, maple strip flooring was generously provided to the University of Maine by Seven Islands Land Co. through its affiliate, A.E. Sampson and Son Flooring of Warren. Associate Professor of Wood Science and Technology Bob Rice measured the moisture content of the hardwood and consulted with the principals about how the tongue-and-groove pieces should fit together, both to avoid potential warp of the floor.

Then it was up to Carignan.

"We made it into something creative," says Carignan. "We came up with a non-standard design and took advantage of the wood grain."

The 4,300-square-foot Hutchins stage floor has been described as an intricate patchwork or herringbone design. Carignan, who is overseeing the installation the flooring by Maine Commercial Flooring of Dexter, calls it more of a



Steve Carignan

Photo by Kathryn Rice

chevron pattern with subtle lines that draw the eye to the stage. Like most performing arts stages, a black finish is preferred to absorb light; the Hutchins stage floor is stained black and coated in polyurethane to increase the durability of the floor.

This is not the first performance floor on which Carignan has overseen construction. In fact, his preference for maple as the hardwood for the flooring stems from his experience with the beauty and durability of the wood.

Like most technical directors whose job descriptions encompass many duties, Carignan was responsible for researching and orchestrating the replacement of an oak dance floor for the Pennsylvania Youth Ballet in Carlisle, Penn. Carignan was with the Ballet troupe for two years.

At the University of Maine, he received a master's degree in theater in 1991.

Today, Carignan is that charismatic-yet-behind-the-scenes kind of guy whose talents make the performing arts on stage spectacular. But this season and for many more to come when the curtain rises in the Hutchins Concert Hall, audiences and performers alike will realize and appreciate the artform that is Carignan's stage.

EMPLOYEE ASSISTANT PROGRAM OFFERINGS

The Employee Assistance Program (EAP) provides free, short-term counseling and professional consultation services for all active and retired faculty and staff, and their immediate family members who have personal or work-related concerns. This confidential resource assists employees with a wide range of issues, such as:

Occupational or Personal Stress	Relationship Conflict
Burnout	(at work and personal)
Conflict Resolution	Financial Concerns
Anxiety Disorders, such as	Legal Referrals
phobias and panic attacks	Alcohol and Drug Misuse and
Depression	Dependency
Marital and Family Issues	Eldercare
Divorce	Career Decisions
Single Parenting	

When a referral is needed, links are made with carefully screened community resources (therapists, psychiatrists, lawyers, physicians, financial consultants, etc.) Confidentiality is the most critical component of the EAP. All contacts are strictly confidential. No information, including participation in the EAP, is disclosed without written authorization from the client. The office is open Monday–Friday, 8 a.m.–4:30 p.m., including noontime. Accommodations for appointments can be made. Call x4014 for a confidential, free appointment with either Polly Moutevelis Karris, director, or Jim Werrbach, psychologist.

Other initiatives of EAP include:

- ▼ Managed Care for Out-Patient Mental Health Counseling
- ▼ Support for Those Who Have Experienced Intimidation/Acts of Violence in the Campus Workplace

News at a Glance

MAINE CODE OF ELECTION ETHICS

All 10 of Maine's candidates for U.S. Senate or the U.S. House of Representatives have agreed to comply with the Maine Code of Election Ethics, an initiative intended to eliminate campaign practices which demean the political process. Steven Ballard, director of UMaine's Margaret Chase Smith Center for Public Policy, co-authored the code, the development of which has been a joint project of the Center, the Margaret Chase Smith Library and The Institute for Global Ethics.

Ballard calls the code an attempt to re-connect elections to the electorate. "Without this connection, we believe the very nature of our society is in jeopardy," he says. Maine's code is believed to be the first of its kind in the U.S.

IT'S ABOUT TIME - AGAIN

Teaching history will again be the subject of a popular annual conference sponsored by the University of Maine Department of History and College of Education.

"It's About Time Again: Teaching History in Maine," will be held Friday, Oct. 4 at Wells Conference Center. It will be highlighted by an address by Duke University historian William Chafe. Other features of the conference include a presentation on the use of computers in the social studies classroom. A panel discussion considering the question: "What should high school students learn from history?" will include Fred Wetzel, an official of the College Board, which administers college entrance exams. Other discussions will consider history and music and literature.

A session on using Maine's archives will be led by Chris Beam of the Muskie Archives at Bates College, and Greg Gallant, Margaret Chase Smith Archives, Skowhegan.

This is the second conference bringing together history teachers statewide to share their ideas and needs. Last year, "It's About Time" drew more than 125 participants.

UMAINE STUDY OF WINTER BLUES

Kelly Rohan, a University of Maine Ph.D. candidate in clinical psychology, is seeking volunteers for a study on winter blues, also known as seasonal affective disorder or SAD.

Rohan is working with Sandra Sigmon, assistant professor of psychology, on a project to determine how attitudes and beliefs contribute to the symptoms associated with winter blues. The problem is marked by fatigue, overeating, oversleeping and feelings of depression during the winter months. It is estimated that about 30 percent of Maine citizens, the majority of whom are women, experience a clinically significant problem with the change of seasons.

Rohan is seeking women over 18 years old to fit into one of two groups - those who clearly experience winter blues and those who do not. Volunteers cannot be taking any psychoactive drugs or be engaged in therapy or psychological counseling.

Individuals who volunteer for the study will be assessed by Rohan for their eligibility to participate. For those who fit her criteria, the first meeting will take no longer than four hours. Volunteers will also fill out a questionnaire and conduct three experimental tasks.

Two other sessions will be held, one in the winter and another next summer, in which participants will repeat the questionnaire and tasks. These sessions will last no longer than two hours.

Volunteers will receive a \$20 payment for the first session and \$10 for each of the following two. Individuals can contact Rohan at 581-2058 for more information or to schedule an interview.



Jim Anderson of American Chimney Corp., of New Jersey cuts off pads used during the installation of a new 150-foot smokestack. The installation was completed last month at the Steam Plant on College Avenue, under the supervision of Facilities Management. The new smokestack was mandated by the Department of Environmental Protection in order that the University's boiler plant be relicensed. It replaces two shorter boiler stacks that have been in use at the Steam Plant for a number of years.

Photo by Kathryn Rice

Look Who's On Campus

A historian and dean of arts and sciences at Duke University will speak Friday, Oct. 4 at UMaine's conference on teaching history. One month before the nation votes for president, William Chafe will give the keynote address: "From Roosevelt to Clinton: The Changing Nature of the American Presidency," as part of the conference, "It's About Time Again: Teaching History in Maine." Chafe, well-known for his scholarship on race and gender issues, is the author of eight books, including *The Unfinished Journey: America since World War II* and *The Paradox of Change: American Women in the 20th Century*.

Judith Goldstein, executive director of the New York-based Thanks to Scandinavia Foundation, will speak Monday, Oct. 7 on: "Fact and Myth: The Holocaust, *Schindler's List* and the Rescue of Danish Jewry." Her lecture is offered in conjunction with two Museum of Art exhibits: *Holocaust: The Presence of the Past*, and *Resistance & Rescue: Denmark's Response to the Holocaust*. Goldstein is a historian and author of several books, including *Crossing Lines: Histories of Jews and Gentiles in Three Communities*. The charitable foundation she heads sponsors activities designed to honor the heroic efforts of the many Scandinavians who rescued Jews during the Holocaust.



Blanche Wiesen Cook, Distinguished Professor of History and Women's Studies at the John Jay College and the Graduate Center of the City University of New York, will give the fifth Howard Schonberger Peace and Social Justice Memorial Lecture on Thursday, Oct. 10: "Eleanor Roosevelt's Crusade for Freedom in the Fascist Era."

Earlier that day she also will give a talk as part of the Socialist & Marxist Studies Luncheon Series: "Women and Power: The End of the New Deal and the Old Empire - Where Do We Go From Here?" Cook is well-known for her prize-winning 1992 biography, *Eleanor Roosevelt: Volume One*. She is currently completing *Volume Two*. Cook, who produces and hosts her own radio show, "Women and the World in the 1990s," is a sought-after expert on history, politics and women's issues.

Maine's "Sensor Valley"

A prototype sensor under development in the University of Maine's sensor laboratory may someday tell motorists when to change their oil and help improve the efficiency and extend the life of internal combustion engines. It is one of the many practical purposes of a new generation of sensors that may contribute to advances in medicine, manufacturing and environmental quality.

The University of Maine is one of a select group in the United States to offer undergraduate- and graduate-level curricula in the theories and applications of sensors. Penn State and the University of California, Berkeley, are two others.

"We are training people for a new emerging market," says Ryszard Lec, research professor in UMaine's Electrical and Computer Engineering Department. With support from a 1993 grant of \$390,000 from the National Science Foundation, Lec and John Vetelino, professor of ECE, developed the new sensor curriculum which combines concept with construction.

The interdisciplinary sensor program being developed combines research, education and business in a synergetic environment to achieve an ultimate product – a unique, state-of-the art sensor product. The effort involves faculty and students from seven departments on campus, LASST, researchers from industrial and government laboratories, and business.

"Our program shows that research and teaching do not have contradictory goals, but they are complementary," says Lec. "The University of Maine has an exceptional opportunity to evolve to the national center in sensor technology. A combination of our unique ECE sensor curriculum, our well-established and strong sensor research and our rapidly growing and successful small sensor business have created a 'Sensor Valley' in Maine."

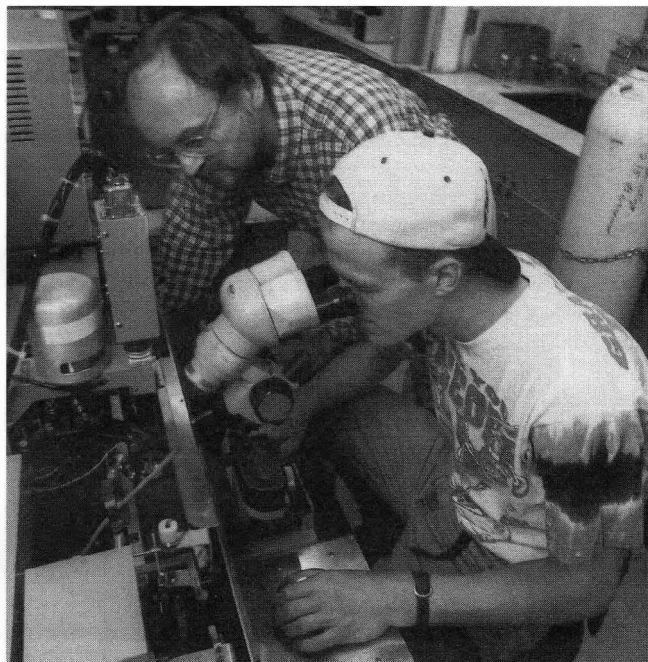
At its most basic level, a sensor is any device which responds to changes in its environment, Lec says. Our eyes, ears and taste buds are sensors. However, the new electronic devices can detect chemicals and processes to which natural sensors are blind.

A total of 30 students have already gone through the undergraduate and graduate programs in the first two years, and 12 more are enrolled this year.

Some graduates have jobs with semiconductor manufacturers and government laboratories, while others are pursuing graduate degrees at UMaine and other institutions. While many jobs have taken students out of state, Lec and his colleagues are helping Maine manufacturers to integrate sensor-based processes into their production and to open job opportunities in the state.

Some graduates have also taken the next step by setting up private companies of their own. These firms include BIODE Inc. of Brunswick; Sensor Research and Development of Orono; and Microconversion Technology in South Dakota. In each case, their research continues with support from federal grants. No products have yet been marketed.

By necessity, the curriculum designed by Lec and Vetelino is interdisciplinary and ultimately based on student research.



Professor Ryszard Lec and student Derek Libby work at an ultrasonic bonder in the Sensor Technology Lab in Barrows Hall. Photo by Kathryn Rice

"Research is an excellent vehicle for teaching. It creates a unique environment in which a student is exposed to problems, and most of them are real life problems," says Lec.

Among active and proposed projects are the following:

▼ In collaboration with Control Devices Inc. of Standish, an automotive oil quality sensor has been developed to tell vehicle owners when to change their engine oil. By indicating the point at which oil actually needs to be changed, the sensor could save consumers money now spent for unnecessary oil changes. It could also extend engine life by reminding motorists that dirty oil could be causing excessive engine wear. Support for continued development of the prototype will be sought from the Ford Motor Co.

▼ In collaboration with BIODE Inc., of Brunswick, researchers are developing a sensor to detect pathogens in blood serum. Work is focusing currently on a method to detect antigens produced by the immune system in the presence of cholera bacteria.

▼ A sensor is being developed in collaboration with Dupont Inc. to monitor the production of polymers under conditions of high temperature and pressure.

▼ A sensor, in collaboration with Control Devices Inc., has been proposed to measure the amount of force applied to a vehicle steering wheel. It would be a necessary component of a new generation of "smart" vehicles.

▼ In collaboration with a New Hampshire company, a sensor is being developed to monitor a process which burns house wastes with microwave energy. Such a product could reduce waste disposal problems in coastal settings or transportation systems.

▼ By listening to sound waves produced by chemical reactions, a sensor can determine precisely when chemical manufacturing processes are complete. Energy could be saved and waste products reduced as a result. In a project involving faculty in the UMaine Chemical Engineering Department, such a device is being developed for pulp and paper and chemical manufacturing industries.

▼ Together with faculty in the UMaine Department of Mechanical Engineering, a proposal is being written to design a sensor to monitor the performance of new composite materials being developed by NASA for space vehicles.

continued on page 13

Fogler Library's URSUS Computer Receives an Upgrade

For the past two years the URSUS library system has been running on undersized technology without sufficient capacity to meet current user demands. In July the computer equipment was upgraded to a new DEC Alphaserver 2100 with RAID storage capacity. The new computer increases system performance by a factor of 10. With the upgrade in capacity, library staff are now able to develop access services for both print and digital collections provided through the URSUS system, and to accommodate the significant growth in end-users served, particularly as public libraries, secondary schools and other community organizations are connected to the network.

Funding for the library system computer upgrade resulted from two grant proposals and a request to the University of Maine System. Part of the money came from the NYNEX/PUC rate reduction case in which Maine's schools and libraries were granted up to \$4 million annually to reduce rates and/or for additional services or equipment. Schools and libraries were represented in a process which resulted in the SLIIP Proposal.

In addition to a statewide area network, the SLIIP Proposal contained several innovative features and solutions, among them assistance in training and other system requirements not traditionally offered by telephone companies. In this latter category, a one-time charge of \$119,000 for an URSUS System upgrade was proposed by the librarians and included in the SLIIP Proposal.

URSUS is part of a rate reduction case because the negotiating teams representing schools and libraries understood the impending impact on the URSUS Information System—the single largest repository of information resources in Maine—once all schools and libraries have access to high speed network connections.

CEAC to Sponsor Employee Development Conference

The Classified Employees Advisory Council (CEAC) will sponsor an Employee Development Conference for all classified employees on campus on Tuesday, Oct. 15. The conference will offer workshops in a wide variety of subjects of interest to staff members.

Workshops geared toward expanding job capabilities and assisting in upward mobility will consist of computer software training for word-processing and desktop publishing: campus operating systems, including ISIS, purchasing, FAST (accounting system), e-mail, and the FirstClass networking system; and training in Human Resources, including Personnel Action Forms (PAFs), payroll processing, and how to apply for positions on campus.

Several personal development workshops will be offered as well, including assertiveness, safety awareness, CPR, stress management, TIAA/CREF planning, resume writing, and a confidence/team-building ropes course with Maine Bound. There will be a number of open houses and tours of campus facilities, such as the Maine Center for the Arts, Career Center, Ornamental Trial Garden and Arboretum, and many more. The Bookstore will be holding a raffle and offering discounts and give-aways to classified employees. A brown-bag luncheon will be highlighted by a talk by Polly Karris of the Employee Assistance Program.

Pre-registration is required; conference brochures will be mailed Oct. 1. President Fred Hutchinson will be requesting that supervisors grant release time as much as possible to all employees who wish to participate. ▲

The URSUS Project is also one of 14 community-based networking projects for telecommunications and information technology that make up the federally funded Maine Project. A U.S. Department of Commerce grant submitted by the University of Maine System and Education Network of Maine, the Maine Project is developing community and statewide partnerships of public and private sector organizations, and individuals to improve the state's education, health, economic development, government services and quality of life for Maine's citizens. The URSUS Project is central to many of the projects because it expands the capacity of the electronic online library catalog and information network, and supports expansion of online public libraries in rural communities. URSUS was awarded \$45,215 toward a hardware upgrade.

URSUS – University Resources Serving Users Statewide – and is the public access catalog of the University of Maine System libraries, and other participating Maine libraries.

continued on page 15

President's Council on Women

Gender Differences in the Professoriate

The Higher Education Research Institute at the University of California at Los Angeles has reported on its 1995-96 survey of almost 34,000 professors at 384 colleges and universities. The results indicate little difference between men and women on many scales, but also some remarkable gender gaps.

Some of the differences support common stereotypes. For example, in the two years prior to the survey, men were much more likely than women to have had a research grant or served as a paid consultant; women much more likely than men to have participated in a teaching-enhancement program or performed volunteer service in their communities.

Other differences are more surprising. Men are much more likely than women to cite raising a family as an important personal objective, somewhat more likely to see intercollegiate sports as overemphasized at their home institutions, and slightly more likely to have experienced marital conflict or children's problems as recent sources of stress.

In general, men and women are remarkably similar in the reasons important to their decision to pursue academic careers, and remarkably dissimilar in their professional and personal goals. They differ little in their satisfaction with their jobs, and greatly in their job-related activities.

Among the greatest and perhaps most unexpected differences are the goals held by faculty for their undergraduate students. Women are more likely than men to rate as essential or very important goals concerned with students' intellectual, moral, emotional, and social development, as well as goals of preparation for employment, further education, family life, public service, and responsible citizenship. Men are more likely than women to value highly only one of the survey's 13 goals, namely learning about the classic works of Western civilization.

Do these differences make a difference? We think they do. For example, they indicate that women contribute importantly to diversity in a campus community. They suggest that so-called "gender-blind" policies and practices have gendered effects. And they support the argument that institutional pursuit of a student-centered learning environment is furthered by appointing women to faculty positions.

V O L U M E S

Recent Works by University of Maine Authors

Parliamentary Politics in Revolutionary Iran

By Bahman Baktiari

(University Press of Florida, 1996)

In this first major English-language study of the Iranian parliament, Bahman Baktiari analyzes the intense rivalry between competing factions in the parliament—known as the Majles—and describes the political battles that have set the tone for many of the key policy developments in Iran. He examines how elections are organized, how candidacies are approved, and how the parliament is structured internally.

Since the revolution of 1979, the institutionalization of revolutionary politics has led to an assertive parliament as a major force in the Islamic Republic but with a turnover ratio of 60 percent, one of the highest in the world. Thus the parliament politics described in this book is a microcosm of the wider factional politics in revolutionary Iran today.

Incorporating personal interviews with over 60 members of parliament, primary materials from the various research centers

in Iran, and firsthand observation of parliamentary deliberations, Baktiari's study illuminates an important dimension of the political evolution of this radical Islamic state.

Baktiari is associate professor of political science at the University of Maine and author of studies in the *Iranian Journal of International Affairs*, *Journal of Middle East and South Asian*, *Journal of Middle East and South Asian Studies*, and *Journal of Church and State*.

UMaine Cooperative Extension

A recent survey of homebound elders in Washington County found that almost 50 percent were able to maintain independent lifestyles and avoid going to long-term care facilities with the help of volunteers in the Senior Companion Program of University of Maine Cooperative Extension.

The Senior Companion Program is a statewide initiative headquartered at the University of Maine. The volunteer program is for older Americans who are interested in helping homebound elders or isolated adults maximize, maintain or regain their independence. In this unique opportunity to become involved with people, Senior Companion volunteers serve 20 hours a week visiting several homebound or isolated adults, often elders. The senior citizen volunteers provide companionship, share information about healthful living and participate in activities such as going for walks, shopping and housekeeping. Most importantly, the role of the Senior Companion is to help combat loneliness and isolation that threaten independence and health.

Throughout Maine, there are 85 volunteers and 350 clients in the Senior Companion Program. Washington County has the largest Senior Companion Program in the state with 42 volunteers assisting 160 elders and other adults. In a recent evaluation of the Washington County Program, 135 seniors who receive services were surveyed. Of the 97 who responded, 48 indicated that, because of the support they received from their senior companion, they were able to stay at home and live independently.

Washington County Extension Educator Deb Eckart followed up on the survey by visiting clients served by Senior Companions. In many cases, Senior Companions have been helping the same elders for several years, building relationships based on friendship, caring and support. One elder, who had been released from a local nursing home to live in a housing complex for the elderly, recounted to Eckart how frightened she was by the move, and how her Senior Companion was the first person she would allow into her apartment. Now eight months later, the elder and her Senior Companion talk daily. The Senior Companion does the grocery shopping and has helped the woman get reestablished in this new chapter of her life. "This lady told me that she really doesn't know where she would be right now if it hadn't been for the help of her Senior Companion," says Eckart, who has administered the Washington County Program for the past two years.



The holding, shipping and handling of American lobsters is the subject of a new bulletin published by the Lobster Institute and

prepared by Robert Bayer, professor of animal, veterinary and aquatic sciences, and executive director of the Lobster Institute.

The publication outlines some tips for those in the industry on how best to handle lobsters to maximize survival during transport and storage – whether they are shipped a few miles or around the world. The bulletin provides information concerning the most critical factor to consider when shipping crustaceans by truck or by air – proper temperature control to prolong the lives of lobsters out of water. In addition, conditions for the tank storage of lobsters are also detailed.

Handling tips include examining every lobster for damage, weakness or disease; moving crated lobsters with care; and banding or purchasing banded lobsters rather than plugged lobsters.

"Economic Development in Maine: Long-term Growth or Short-term Fixes?" is one of the newest publications of the University of Maine Bureau of Labor Education.

The publication emphasizes the crucial role of building and maintaining a strong development capacity as the most important foundation of long-term economic health. It notes that policy makers and planners "should think long and hard" before jumping into the economic "war between the states" strategy of offering large incentives to attract jobs, given the many problems arising from such a strategy.

As Maine enters the 21st century, it faces great economic challenges that may become even more urgent with continuing cuts in federal funding to the states. Planning for economic development should not be driven by the narrow interests of the most politically and economically powerful groups in the state. Rather, it should take into account the long-term needs of all Maine citizens and communities.

Send notices of upcoming campus events and any fall schedules to
Maine Perspective for inclusion in the
UMaine Calendar.



Janice Zeman, assistant professor of psychology: "Display Rules for Anger, Sadness, and Pain: It Depends on Who is Watching," *Child Development*, 67:953-73 (July 1996).

Herman Weller, associate professor of education: "Assessing the Impact of Computer-based Learning in Science," *Journal of Research on Computing in Education*, 28(4):461-85 (1996).

Matthew Moen, professor and chair, Department of Political Science: "The Evolving Politics of the Christian Right," *PS: Political Science and Politics*, pp. 461-64 (September 1996). This article was written in conjunction with a PBS television series: *Vote for Me*, that will air in October.

Cynthia Mahmood, assistant professor of anthropology: "Why Sikhs Fight," *Anthropological Constrictions to Conflict Resolutions*, ed. A. Wolfe and H. Yang. Athens: University of Georgia Press (1996).

Pushpa Gupta, professor, Department of Mathematics and Statistics, co-authored with R.D. Gupta (University of New Brunswick, Canada): "An Additive Random Environmental Model," *Journal of Applied Statistical Science*, 4(1):45-56 (1996).

Gloria Vollmers, assistant professor of accounting: "Accounting for Idle Capacity: Its Place in the Historical Cost Literature and Conjecture about its Disappearance," *The Accounting Historians Journal*, 23(1):25-50 (June 1996).

Donald Hayes, associate professor, Department of Psychology, **Elaine Gershman**, associate professor emerita, Department of Psychology and **William Halteman**, associate professor, Department of Mathematics: "Enmity in Males at Four Developmental Levels: Cognitive Bases for Disliking Peers," *Journal of Genetic Psychology*, 157(2):153-160 (1996).

Raymond O'Connor, professor of wildlife ecology: "Toward the Incorporation of Spatiotemporal Dynamics into Ecotoxicology," in O.E. Rhodes, R.K. Chesser, and M.H. Smith (eds.), *Population Dynamics in Ecological Space and Time*, pp. 281-319, Chicago University Press.

Professor **Michael Lewis**, Department of Art, has a one-person exhibition: *Place by the River*, at the University of Missouri, St. Louis, Sept. 3-Oct. 5. (20 recent paintings of the Orono area.) Lewis also has a painting: *Peace Be Within Thee (Jerusalem)*, in an invitational group exhibition: *Pray for the Peace of Jerusalem, Contemporary Visions*, at the Starr Gallery in Newton, Mass., Sept. 8-Nov. 3.

Kristin Sobolik, assistant professor of anthropology and quaternary studies, recently published a monograph: "An Atlas of Turtles to Facilitate Archaeological Identifications," with D. Gentry Steele (Texas A&M University) through The Mammoth Site Inc., South Dakota, as well as an article in *Current Anthropology*: "Dietary Variability Among Prehistoric Forager-Farmers of Eastern North America," with Kristen Gremillion (Ohio State University).

Nancy Hall, assistant professor of Communication Disorders, two chapters – Hall and Dorothy Aram: "Classification of Developmental Language Disorders"; and Deborah Fein, Michelle Dunn, Doris Allen, Dorothy Aram, Hall, Robin Morris and Barbara Wilson: "Neuropsychological and Language Data," *Preschool Children with Inadequate Communication: Developmental Language Disorder, Autism, Low IQ*, edited by Isabelle Rapin, published by MacKeith Press (1996).

Jonathan Plucker, assistant professor of educational psychology: "Secondary Science and Mathematics Teachers and Gender Equity: Attitudes and Attempted Interventions," *Journal of Research in Science Teaching*, 33(7): 737-751 (1996).

Mark Pellowski, former undergraduate psychology major, and **Alan Rosenwasser**, associate professor of psychology: "Circadian Phase Shifting Associated with Routine Cage Maintenance: A Retrospective Analysis," *Biological Rhythm Research* 27:130-137 (1996).



Brawley Research Subject of Swedish Newspaper Article

The July 17 edition of *Västerbottens-Kuriren*, a Swedish newspaper, published an article: "Tängen lever mot alla odds," on a project that Susan Brawley, professor of plant biology and pathology, and her laboratory have conducted over the last four years in Sweden. University of Maine scientists featured in the article in addition to Brawley were her graduate student Ester Serrão; Dr. Gareth Pearson, a postdoctoral associate; and UMaine graduate Joseph McIntyre. The purpose of the research is to identify the adaptations that permit a few marine species, including *Fucus vesiculosus*, a brown seaweed, also common in Maine, to thrive in the modern Baltic, which is nearly freshwater. Also, the September issue of *Discover* features work by Serrão and Pearson on successful reproduction by marine species in turbulent environments such as the intertidal zone because of their responsiveness to water motion, which inhibits gamete release. The story appears in the "Breakthroughs" section of the magazine.

Segal in Boston Globe

A June 3 *Boston Globe* article, "This Wasn't a Part of the Plan," explores the subject of technological progress and how it "often doesn't turn out the way it's supposed to." Among the sources for the story was Howard Segal, Bird and Bird Professor of History and director of UMaine's Technology and Society Project. "People think that technology shapes society," says Segal in the article. "But as often as not, society shapes technology."

Kling in Aquaculture News

The breakthrough cod research by Linda Kling, associate professor of animal and veterinary science, is front-page news in the August issue of *Aquaculture News*, the national publication serving the Aquaculture Industry. The tabloid published the press release issued by Public Affairs on Kling's research, which focuses on the feasibility – and now the real possibility – of raising cod in an aquaculture operation. News of Kling's research was widespread this summer, including an AP wire story.

Markowsky, Segal in Maine Sunday Telegram

In July, the *Maine Sunday Telegram* reported that the Portland Fish Exchange backed off its plans to incorporate a new \$140,000 computer system as a means to raise seafood prices by accepting electronic bids from around the world. The decision was made when fears surfaced that remote bidders might put the Exchange's most loyal buyers out of business. The debate is part of an emerging national discussion concerning the impact of technology on existing business relationships. Bird and Bird Professor of History Howard Segal noted that there is a "real ambivalence among Americans now about the price paid for technological advancement." But it is acknowledged, even by opponents of remote electronic bidding at the Portland fish auction, that "the forward momentum of technological change is relentless." Professor of Computer Science George Markowsky says that, "if more and more people are buying (electronically), they won't even know you are there if you don't do it."

Brazee a Resource for Los Angeles Times Syndicate

Ed Brazee, associate professor of middle level education, is a resource for a Los Angeles Times Syndicate piece on the role of cliques in the lives of young teenagers. The article in the syndicated column, "Middle Years," also cites advice from professional resources at California's Fuller Theological Seminary, Utah State University, the University of Cincinnati and the University of Colorado.

WITHDRAWING FROM THE UNIVERSITY

Deadline for withdrawing from the University at the end of the first third of the semester is Thursday, Oct. 3, 4:30 p.m. Students considering withdrawal from the University should report to Dwight Rideout, dean of Students and Community Life, Memorial Union, for information about the correct procedure. Before making a final decision, however, students are urged to explore all possible options that might help them to complete the semester.



Robert Bayer, professor of AVAS and executive director of the Lobster Institute, was a speaker at the National Marine Educators Association Annual conference at Durham N.H. The talk was: "The World Wide Web as an Educational Tool for the Lobster Institute."

Stuart Bullion, associate professor, Department of Communication and Journalism, served on a panel along with Chancellor MacTaggart at the Maine Press Association fall conference in Bar Harbor Sept. 7. The subject was communication and journalism education in the University of Maine System.

Patricia Counihan, manager of the Career Center, co-chaired the annual conference of the Eastern College and Employer Network (ECEN), held in Rye Brook, N.Y., Sept. 8-10. At the conference, Counihan was awarded the ECEN Presidential Award recognizing her sage counsel, service and dedication to the organization. The conference brought together over 200 career services directors and employers seeking to hire college graduates.

Alan Parks, director, Upward Bound programs, presented a workshop: "A Hands-on Introduction to the Internet," at the 15th annual conference of the National Council of Educational Opportunity Associations, Washington, D.C., Sept. 4. Alan is also the national Website manager for the NCEO, and will serve another year on the NCEO's Technology Committee.

Russell Quaglia, director of the National Center for Student Aspirations, presented a session at the 15th annual conference of the National Council of Educational Opportunity Associations, Sept. 5 in Washington, D.C. His topic was: "Assessing Student Aspirations."

Susan Brawley, professor of plant biology and pathology, is the new editor (1996-2001) of the *Journal of Phycology*. This journal publishes research on all aspects of algae and is highly rated in the fields of marine biology, aquatic science, and botany.

Janice Zeman, assistant professor of psychology, and graduate students Susan Penza and Kim Shipman, presented: "Preschooler's Affect Management Decisions: Socialization Influences of Parents and Peers," at the Annual Meeting of the American Psychological Association in Toronto in August.

Matthew Moen, professor and chair, Department of Political Science, was elected chairperson of the 388-member Religion & Politics Division of the American Political Science Association for 1996-97 at the annual meeting of APSA, Aug. 28-Sept. 1.

Mary Zawieski, assistant director of dining services, received the 1996 NACUFS Regional Presidents Award for Region I, at the National Association of College and University Food Services in Albuquerque, July 9-13. Mary was honored with this award for service to NACUFS regionally and nationally. She is currently the treasurer for Region I.

Aug. 16, **Anthony Strong**, manager of catering services, accepted an award for Dining Services from the Penobscot Job Corps in recognition of the continuing support and training assistance Job Corps students receive in the Department of Dining Services at Wells Catering Center. It was during Strong's first year that he developed this program with Job Corps students in the Wells. The Job Corps program continues this year.

In early June, **Stephen Hornsby**, director, Canadian-American Center and associate professor of anthropology, led 14 college and university faculty on a nine-day Atlantic Canada Faculty Institute to New Brunswick and Prince Edward Island. He also attended the annual meeting of the Canadian Association of Geographers in Saskatoon, Canada, May 11-16, and presented a paper: "The Impress of British Authority on Colonial Capital Cities in Atlantic Canada," at the biennial meeting of the Association for Canadian Studies in Australia and New Zealand, Hobart, Tasmania, July 7-10.

Christa Schwintzer, professor of plant biology, presented a paper: "Field Nodules of *Ainus incana* ssp. *rugosa* and *Myrica gale* Exhibit Pronounced Acetylene-induced Declines in Nitrogenase Activity," at the annual meeting of the Ecological Society of America, Providence, Aug. 10-14.

François Amar, associate professor of chemistry, attended the Gordon Conference on Atomic and Molecular Interactions, Colby-Sawyer College, New London, N.H., June 30-July 5.

Cynthia Mahmood, assistant professor of anthropology, has been appointed editor of a new University of Pennsylvania Press series: "The Ethnography of Political Violence."

As a Hospice of St. Joseph volunteer, **Mary Knowlton** recently received the 1996 "Special Volunteer Award" from the Home Care Alliance of Maine." Knowlton, a rehabilitation specialist at UMaine, has been a St. Joseph Hospice volunteer for nearly 12 consecutive years, averaging three to four volunteer hours per week. She began her Hospice volunteer training in 1984. During her first five to six years as a volunteer, she was directly involved with dying patients and their families. Later, she served as facilitator for Hospice's bi-monthly bereavement support group. She has continued as lead facilitator for this group for the past six years.

Professor **Dennis Cox**, music, attended the Fourth World Symposium on Choral Music, Aug. 7-14 in Sydney, Australia. Performances from the most outstanding choirs from the world over performed each night at the famed Sydney Opera House for over 1,200 delegates attending.

Professor **Michael Lewis**, Department of Art, gave a gallery talk about his paintings at the University of Missouri, St. Louis, on Sept. 5. Lewis also presented a paper: "Physics and Metaphysics of Landscape," at a symposium: "Landscape Perspectives: Art, Poetry, Philosophy," organized in conjunction with the exhibition of his work and co-sponsored by the Art Department and Center for Humanities at the University of Missouri (Sept. 6).

Mitschka Hartley, graduate research assistant, Department of Wildlife Ecology, and **Malcolm Hunter Jr.**, Libra Professor of Conservation Biology, gave a paper: "Forest Cover, Artificial Nest Predation Rates and Edge Effects: A Meta-analysis," at the joint annual meeting of the Ecological Society of America and the Society for Conservation Biology, Providence, Aug. 10-14.

Raymond O'Connor, professor of wildlife ecology, chaired a session: "The Interface of Theoretical Ecology and Conservation Biology", and

presented a paper: "Ecological Theory as a Path to Adaptive Conservation Monitoring," at the Society for Conservation Biology Annual Meeting, Providence, RI, Aug. 12. O'Connor also presented a paper: "Using Hierarchical Models of Neotropical Migrant Birds for Environmental Assessment," at the meeting of the Society of Canadian Ornithologists, Fredericton, Aug. 25.

Colin Martindale, professor of psychology, attended the XIV Congress of the International Association of Empirical Aesthetics in Prague, Aug. 1-4, where he presented his presidential address: "Some Easy Answers to What Should be Easy Questions." He also presented a talk: "How Would Berlyne Have Changed His Theory of Aesthetic Preference," in a symposium on D.E. Berlyne and the theory of collative motivation. In Prague, Martindale was re-elected to serve another term as president of the association. Other recent presentations include: "The State of the Art in Psychology of the Arts," invited address, American Psychological Association convention, Toronto, Aug. 9; and "The Future Is Ours: Neo-positivism Will Save Us," in symposium: "Three Divisional Presidents, Past and Reflect on the Future of Psychology and the Arts," American Psychological Association convention, Toronto, Aug. 10; "Psychological Determinants of Artistic Change," in symposium: "Psychology of Stylistic Change," XXVI International Congress of Psychology, Montreal, Aug. 18; and "The Laws of Literary History," plenary address, V Conference of the International Society for the Empirical Study of Literature, Banff, Aug. 22.

Howard Patterson, professor of chemistry, presented a paper co-authored by **Mohammad Omary**, chemistry graduate student, and George Shankle, professor of chemistry at Angelo State University, San Angelo, Texas, at the 212th American Chemical Society National Meeting, Orlando, Aug. 25: "Photoluminescence and Electronic Structure Studies to Probe Metal-Metal Interactions and Optical Memory in Thallium Dicyanosilver (I)."

Professor **Melvin Burke**, Department of Economics, presented a paper: "Transitional Corporations and Global Unemployment," at the international seminar: "Las inversiones extranjeras y las empresas transnacionales en epoca de globalizacion," at the University of Puebla, Mexico, Aug. 29.

School of Marine Sciences *continued from page 2*

As of mid-September, a total of 20 faculty members, including all of those in the former Department of Oceanography, had committed to the school on a full-time basis. Six additional faculty members will join the school with appointments split between the school and their current departments. Altogether, the school currently includes faculty from nine departments.

Although other marine science programs around the country have been reviewed for structure and content, UMaine's approach will be tailored to existing expertise and the state's needs.

"We've been a sleeping giant in marine sciences for years," Sidell says. "There is a remarkable depth and breadth of expertise at this institution. More than 70 faculty and professional staff have indicated that a significant part of what they do is marine-oriented. They are distributed over 18 units ranging from resource economics and policy and anthropology to molecular biology."

The new school's strength, Sidell suggests, also stems from UMaine's cumulative experience in cold water fisheries, physical

and chemical marine sciences and marine policy, and its proximity to the state's 3,500-mile Gulf of Maine coastline. With direct salt water access, the Darling Marine Center in Walpole is also a critical component of the school's capacity for academic, research and outreach activities.

The school has also been given the leadership for developing a new aquaculture research proposal through the joint federal and state program known as EPSCoR. Presently, the University's aquaculture program remains in the Department of Animal, Veterinary and Aquatic Sciences. Sidell emphasizes that decisions on where such programs will be located in the future will be made through ongoing discussion and consultation.

"My goal is to have an academic unit of sufficient size and excellence so that we can establish a nationally significant profile. The long-term health and vitality of the economy of the state of Maine is tied to having a good vigorous scientific enterprise at the graduate research center of the state university system.

"Examples have been cited around the country. It's not a coincidence that Silicon Valley is located on the doorstep of Stanford University. Research Triangle Park in North Carolina has the University of North Carolina, North Carolina State and Duke.

"The oceans are also a global system, and we have people who are working all over the world. That also helps Maine, the fact that we have a presence that can be recognized around the world." ▲

FACULTY RESEARCH FUNDS COMMITTEE

The Faculty Research Funds Committee announces FY97 deadlines for competitions:

Regular Faculty Research Fund Award October 23

Summer Faculty Research Fund Award December 16

Note: The Scientific Equipment and Book Fund competition will not be held this year due to a substantial reduction in the funds available to the Faculty Research Funds Program. To compensate, the Committee is "relaxing" the restrictions on equipment purchases in the Regular Fund competition.

The Regular Faculty Research Fund Award supports work that can be completed in one year and provides research support other than faculty salaries. The Summer Faculty Research Fund Award provides \$5,000 awards for faculty summer salaries for a minimum of 1.5 months research effort.

The purpose of these funds is to stimulate and assist individual members of the faculty to initiate or redirect research or studies of a scholarly nature. Eligibility is limited to full-time faculty. This includes tenured, tenure-eligible, and soft-money faculty for whom research is an expected component of their appointment. Faculty are eligible to receive the same award every three years. Proposals will not be considered from individuals with delinquent reports from any previous Faculty Research Funds Awards.

The Faculty Research Funds Committee represents a broad range of disciplines from the entire University of Maine faculty. Consequently, proposals should be written for a general audience (except the Methods and Materials section, where discipline-specific details are necessary).

A total of \$115,000 has been allocated for these competitions. Approximately \$55,000 for the Regular Faculty Research Fund Award (10-12 awards are expected to be made); and approximately \$60,000 for the Summer Faculty Research Fund Award (12 awards are expected to be made).

It is not appropriate for committee members to assist colleagues in proposal preparation and later evaluate their work; however, past recipients of awards and past committee members may serve as resource persons. A copy of the FY96 Annual Report of the Faculty Research Funds Committee is available in the Offices of the Deans. Applicants may also contact Gayle Anderson, x1498, if they would like to review successful applications kept on file in the Office of Research and Sponsored Programs.

The Committee is also announcing a deadline of March 19, 1997 for receipt of nominations for the Presidential Research & Creative Achievement Award. This award (in the amount of \$1,500) is made to a faculty member who has attained distinction in research or creative achievement.

Application packages are available in the Offices of the Deans and in the Office of Research and Sponsored Programs, 424 Corbett Hall, x1498. Applicants should make sure they use this year's application packages.

Sensor Curriculum *continued from page 8*

These and other sensor applications require students to have knowledge in areas that may include biochemistry, wood science, chemical engineering, mechanical engineering and business. By the time they complete their training, students have become familiar with topics relevant to the application, and they have designed, produced and tested their new sensor in a state-of-the-art sensor fabrication laboratory.

To complete their lab tasks, students cut and polish materials – sputter electrodes and their films, attach electrical connections and put their devices through a variety of tests. Their goal is to show that their new sensor responds consistently and reliably.

In the curriculum, students have an opportunity to develop sensors that are not only related to ongoing research projects, they also pursue their own creative ideas. For example, one undergraduate student developed an accelerometer that he tested in his car; another designed a sensor enabling his dog to open a house door. Other student projects led to sensors that monitor solidification of diesel fuel in a vehicle or measure lung pressure. The demands for new sensors are almost endless, says Lec, and the chances for exciting jobs for students in this field are very high.

One advantage to this process is the continuous updating that is done to the curriculum. "After a while any curriculum becomes a little outdated. The problem is to find the mechanism to keep it current. Research is the answer because it updates the curriculum in a natural way," says Lec.

The heart of these new devices are so-called "smart" materials. When subjected to a stress such as a rise in pressure or temperature, the materials change their electrical properties. An example is the quartz crystal used in electronic watches. Under the influence of a battery, the crystal vibrates at a regular rate.

Sensors already have many uses ranging from automobiles and home appliances to the airline industry, Lec notes. The potential expansion of this technology led the U.S. Department of Commerce to identify sensors as one of the top 10 new technologies of the 1990s. ▲

UMaineNet *continued from page 2*

administers Technology Fee monies and reports to the provost, and from Instructional Technologies. The funding totalling \$400,000 paid for the creation of the ATM backbone and the wiring of 948 jacks for student computers. It is hoped that additional funding can be allocated to complete the project, establishing 3,924 computer jacks accessing the ATM system campuswide.

"This positions us to meet the increasing demand of students to have access to the network system," says Byther. "More students are arriving on campus with PCs, and such network accessibility becomes a factor in recruiting students. This network is designed to handle the present computing demands and, with its expansion capabilities, the needs of the future as more and more students bring their own computers."

Campus initiatives to facilitate computing by residential students began in the early 1990s with the establishment of the MacAct, a program sponsored by Campus Living that allowed the leasing of computer equipment. It was followed by ConnectMe, a campus network and server established by CIT that allowed students online access with the appropriate software for an annual fee.

ConnectME not only verified the need for a new, high-speed and easily accessible campus network, but made it clear that students largely need basic connections to the Internet, e-mail and computer conferencing, and access to the latest software application packages, says Byther.

While ConnectME last year allowed network connections for students living in six residence halls, UMaineNet is in all campus residential facilities except for University Park and York Village, which are now under study. Five teams of Instructional Technologies technicians have spent the opening weeks of the fall semester working 11-hour days, five days a week to get the bulk of the network card installed. The installation has been accomplished with the cooperation of Campus Living, CAPS and Purchasing.

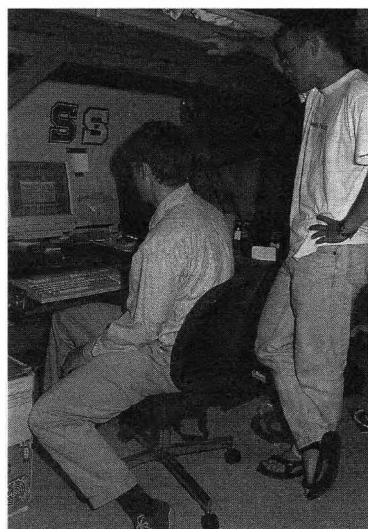
Unlike past network connections when students had to bring their computers to CIT for network card installation, technicians are making house calls. That, says Mike Conlogue, is making a difference.

"We are more student-oriented than ever before, working with students as customers and treating them as such by going to their rooms in the residence halls," says Conlogue, a telecommunications engineer with IT. "Every room I've been in where students have signed up for network connections in the past, they say this kind of service is the biggest plus."

Use of UMaineNet by students not only gives them direct, high-speed access to the network, but reduces demand on campus modem pools, which in the past have sometimes been too few to keep up with demand. The modem pools, administered by CAPS and IT, handle an average of 1,000 calls daily.

Similarly, the high student demand for computer access exceeds the services available in the four public computer clusters across campus. Establishment of new public clusters constitutes a major investment in more equipment, maintenance, facilities and staffing. "It makes it more important than ever that we move computing back to the student desktop where the technology is readily accessible when it is needed, as opposed to going to a cluster and waiting for the next available computer," says Byther. "And as computing is further imbedded in the curriculum, access become mandatory, and must be simple, easy and convenient."

In the long-run, Byther predicts, public computer clusters on campus will become more for high-end usage, providing students access to sophisticated technology and equipment that is unaffordable or impractical for individuals to purchase. At the same



Instructional Technologies network specialist Channing Jones installs a UMaineNet network card in the computer of Brandon Keller of Norridgewock, a sophomore in electrical engineering.

time, the costs of personal computers will continue to go down. The arrival of "network computers" in the \$500-range will further promote ubiquitous access to networks. The result will be multi-faceted, including a movement away from public clusters and into students' living environments when there is need for general computing and network access.

"The Internet and Web have pushed the technology and the need for connection," says Byther. "UMaineNet gives us the infrastructure that will remain there permanently and help us meet student demand for more access. As students arrive with more of their own computers, we will now have the infrastructure to serve them."

"We're trying to encourage students to bring their own computers to campus by making it easy for them to gain access to the Net and computing facilities. It is increasingly an integral part of the teaching-learning process." ▲

FOGLER LIBRARY WEB DAY

Friday, October 11, 8 a.m.-5 p.m.

The ins and outs of World Wide Web navigation, and the tools necessary to create your own site, will be the focus of a daylong program, offered by the Fogler Library Web Team. The training session is designed for members of the local community, including business representatives interested in creating a Web presence for themselves or their organizations.

Areas of focus will include an overview of the World Wide Web, introduction to HTML, Photoshop and graphics for the Web, and Web page design and style. For more information on Web Day or to register, contact Gretchen Gfeller, 581-1675.

IACUC TRAINING ORIENTATION PROGRAM

The Institutional Animal Care and Use Committee's (IACUC) fall offering of its biannual training/orientation program on the care and use of animals will be held on Wednesday, Oct. 16, 3-5 p.m., 427 Corbett Hall (across from the Gym). People who have attended previous training sessions do not have to attend. This campus-wide training/orientation program is in compliance with federal regulation and the University's approved Animal Welfare Assurance. All faculty, staff, and students who work with live, vertebrate, non-human animals are required to participate in the program. The IACUC will not act on protocols for approval of animal use until all project personnel have been certified as having completed the training program. Contact Gayle Anderson in the Office of Research and Sponsored Programs, x1498, for registration information.

URSUS *continued from page 9*

The Bangor Public Library, the Maine State Library, and the Maine State Law and Legislative Reference Library contribute information to URSUS. The database resides on a computer located on campus, and is attached to a statewide telecommunications network. URSUS provides access to cataloged resources of the participating libraries located throughout the state.

Currently URSUS merges the separate collections of 12 libraries into a single common catalog of over 2.5 million items – a virtual library that is bigger and more inclusive than any individual member library. The catalog indexes the majority of print and nonprint materials for all the libraries, including books, serials, microforms, sound recordings, maps, government documents and other audiovisual formats. In addition to a bibliographic description of each item, URSUS provides location and status information so users have up-to-the minute information on library materials (available, checked out, ordered or being processed, etc.). Electronic requests for items located in URSUS may be entered from any point on the network.

URSUS also serves to connect users to other electronic resources: locally mounted journal and periodical indexes, full text and image collections, and links to other information resources. Searchers from around the world can reach URSUS through the Internet. URSUS also provides outbound Internet access – gateways to global information, including other library catalogs, electronic journals, article citation databases, and

UMaine Extramural Awards

Peggy Agouris, assistant professor of spatial information science & engineering, and NCGIA senior researcher, and **Max Egenhofer**, associate professor of spatial information science & engineering and NCGIA associate director, have been awarded \$80,000 from the Office of Research and Development, Arlington Vir., for a project: "Image Query by Sketch." This project will investigate the use of computer sketches for the retrieval of specific images from large digital image databases.

Lynn Katz of the Department of Civil and Environmental Engineering, and **Rodney Bushway** of the Department of Food Science, and **Brenda Speer** of the Department of Biochemistry, Microbiology and Molecular Biology, have been awarded \$16,200 from the U.S. Geological Survey through the UMaine Water Research Institute for a project: "The Fate of Hexazinone in Groundwater Environments." This project will evaluate the chemical stability and degradation mechanisms of hexazinone (trade name Velpar) in ground-water field and laboratory studies.

Eric Landis of the Department of Civil and Environmental Engineering has been awarded \$64,675 from the National Science Foundation for a project: "Applications of Microtomography to Fracture Processes in Cement-Based Materials." Using x-ray microtomography, the investigator will study internal cracking in samples of concrete. The long-term goal is accurate assessment of the condition of reinforced concrete structures.

Paul Cappiello of the Department of Applied Ecology and Environmental Sciences has been awarded \$5,000 from the Maine Department of Conservation for a project: "Creation of a Photo-CD Resource for Teaching Street Tree Identification Traits." This project will produce a photo CD with text to help volunteers in the Maine Community Forestry Assistance Program to identify common native and exotic tree species used for tree plantings.

Gary Quimby of the University of Maine Children's Center has been awarded \$443,873 from the Maine Department of Human Services for support of the center during FY 1994, 1995 and 1996. This grant supports full-time child care services for low-income student families.

government information. The system menus lend topical organization and selection to the vast, chaotic array of evolving electronic resources. World Wide Web software provides a graphic interface, thereby enabling users to search the online catalog to retrieve the full text of electronic documents linked to bibliographic records.

URSUS, the University Libraries Information System, was created with funds from a 1986 bond referendum. URSUS began as an online catalog and expanded to provide access beyond local library holdings using Gopher and Telnet protocols. With the meteoric rise in popularity of the World Wide Web, the Libraries are now evolving URSUS as part of a digital library information system, which will provide uniform and unified network access to the world of electronic resources. ▲

HOW CAN I ACCESS URSUS FROM A REMOTE LOCATION?

Dial Access to URSUS

To dial into URSUS from off campus, you'll need:

- a VT-100 terminal or compatible
- a modem set at 1200 baud
- an analog phone line/local phone number

Once connected:

- type ursus (lower case) at login prompt
- type v
- to log off, go to opening menu, type L

Dial access to URSUS through UMS campus modem groups

CAPS maintains remote access dial in modem groups that provide a connection to a terminal server. Once connected to terminal server, select the URSUS system, and follow the above connection (and disconnection) steps. Contact CAPS for the location nearest you.

Connect to URSUS via Telnet

This option is available to anyone with an Internet connection. It is also available via PC/modem connection to services such as CompuServe. —Telnet to: ursus.maine.edu, then follow the above connection (and disconnection) steps.

Connecting via the World Wide Web

From Netscape or Mosaic, URL:
<http://www.odyssey.maine.edu/URSUS/>

Access Restrictions to Databases

Until user authentication is implemented, access is restricted to network address. Access is unrestricted for authorized users of the UMaine System network, and the local campus and CAPS modem pools. Access through commercial services (AOL, etc.) is restricted.

Noyce *continued from page 2*

"Some don't realize that she was extremely generous elsewhere, particularly in Orono with the University of Maine," he explains. "Her legacy here includes our Maine Center for the Arts, our Libra professorships, student scholarships, our marine research center in Walpole, and many other areas."

Mrs. Noyce's financial contributions to the University of Maine totaled nearly \$4 million, including:

- \$2.5 million for UMaine's faculty endowment
- \$1 million for its Maine Center for the Arts
- \$218,000 for merit-based scholarships
- \$62,000 for UMaine's Ira C. Darling marine research center in Walpole.

"Betty was sincerely committed to creating opportunities for Maine people and to improving Maine's quality of life," Hutchinson says. "We are so grateful that she saw the University of Maine as being one way to create those opportunities in Maine and to improve the quality of life." ▲

Information Technology *continued from page 1*

important than ever that critical partnerships be formed between the University and businesses and schools throughout the state in an interdisciplinary – and a more holistic – approach to problem-solving.

"We see information technology as just germinating as a cohesive effort and focal point in the state," says Cook. "The exchange of information via the Internet is growing, but that is only one dimension. Research and its applications for making infrastructure work, as well as training and programming, are among the many areas where the University can be most helpful."

The history of information technology at the University of Maine – and in the state – has its roots in public investment in UMaine and in academic innovation, including the establishment of a computer science degree program in 1975 followed by the formation of a department in 1981.

Bond issues in the 1980s gave the campus sizable funding to bring PC computing to campus, says Tom Byther, chair of the Department of Computer Science and interim director of UMaine Instructional Technologies. Bond issues gave the System and this campus "a shot in the arm to really bring PC computing potential to campus," he says. "Up to that point, most of the computing was via terminals connected to the mainframe. The first administrative and academic computing was done on a 1620 located in Aubert Hall in the early '60s."

Other milestones in recent years include initiatives and grant proposals to different computer companies that resulted in contributions of equipment across campus – from business administration and computer science to chemical engineering and forest resources. The establishment of the National Center for Geographic Information and Analysis in 1988 also was further evidence of the growing recognition of the expertise and leadership of UMaine in the area of information technology. In terms of academic computing that directly impacts students, the establishment of the Technology Fee has provided the funding to establish public computer clusters, and computer classroom facilities. Technology Fee monies, administered by the Academic Computing and Advisory Committee, continue to fund major computing academic initiatives in colleges and departments across campus.

"The equipment grants changed the complexion of computing on campus," says Byther. "PCs were coming in at one level, the mainframe at another. Equipment donations and purchases gave us computing at the high-end PC and workstation level, helping us to achieve a full spectrum of computing."

"It was computing on this campus that led to the formation of CAPS to serve the needs of the System when it was established. Since then, CAPS has been an instrumental factor in the campus computing environment, including providing network connections and consultants as resources," Byther says.

Today, says Byther, one can look anywhere on campus and find information technology being used. "That speaks to the importance and the initiative of our faculty to remain on the cutting edge. For the University, that also means it's one heck of a ride trying to stay up with the technology, but it is necessary to remain heavily involved if we are to remain a leading institution. For the state," says Byther, "that means it has a tremendous resource it can turn to to see innovative ways that technology is being used, directions to take and resources to tap."

A cross-section of the hundreds initiatives at the University of Maine provides insight into the scope and diversity of information technology across campus that has implications statewide and beyond. It also provides a window on the future.

Preparing Maine Schools and Teachers for New Technology

The College of Education is involved in two statewide technology initiatives - the new ATM (Asynchronous Transmission Mode) switching project and the Maine School and Libraries Network training project.

Initially, the advanced interactive fiber-based ATM network will provide high-speed, real-time interactive voice and data communications to participating schools and libraries and then expand its customer base to include business, the healthcare industry and government agencies. Maine's 170 public high schools, vocational centers, and selected libraries will have the opportunity to connect to the ATM network being installed by NYNEX. As a pilot site, the College will have use of the ATM connection and equipment at no cost for one year, beginning later this fall. The College will test the capacity and efficiency of the equipment, develop innovative applications, and serve as a leading resource for the four pilot-site high schools in the state.

Professional development of teachers to effectively use technology in the classroom is essential to ensure Maine students are competitive in a high-tech world and to the success of the state's technological leadership. The College of Education, in a project administered by the Maine Science and Technology Foundation, is in the process of training approximately 1,265 Maine teachers and librarians in basic and intermediate computer skills ranging from using e-mail and Web browsers to posting to news groups and listserves. The technology training and curriculum development project is a collaborative effort with the University of Southern Maine and Northern Maine Technical College.

Smart Technology for Maine Businesses

A team of University engineers in the Department of Electrical and Computer Engineering is bringing the latest computerized tools to the factory floor to apply so-called "intelligent systems technology" to industrial processes. Funded by a \$1.2 million grant from the state and the Department of Energy's EPSCoR program, administered through the Maine Science and Technology Foundation, the technological tools being developed will improve the production processes of companies in the state. The intelligent systems project is seen as an example of University research overlapping with industry needs. The project will involve training sessions and workshops on intelligent systems applications. Additional training will be carried out through a new videoconferencing system being purchased under the grant. Public schools also will be involved through educational projects designed to inform students about manufacturing facilities in their communities.

The relatively new technology being brought to bear on the needs of Maine companies involves the artificial neural network, which gives machines a human-like type of intelligence. Consisting of sensors, communication links, computing elements and learning software, the neural network system is part of the realm known as "smart technology." With the help of the University of Maine, the technology is already in use at S.D. Warren in Skowhegan, where researchers are attempting to predict the quality of wood pulp based on information about wood chips, chemicals and other factors. At Jackson Laboratory in Bar Harbor, a neural network program is being used to look at images of chromosomes and to automatically classify them.

Maine's Largest Library as a Statewide Resource

Over the past 10 years, networks of computers have moved from being a small but important aspect of university research to a worldwide phenomenon involving millions of users and thou-

sands of service providers. The Internet and its underlying information infrastructure have become the foremost technological revolution of our time. For higher education and libraries, the implications of a pervasive electronic information infrastructure are immense. Innovations such as distance education and networked access to information resources present only a snapshot of expanded opportunities and challenges for scholarship, research and the library.

Like many academic libraries keeping pace with information technology, Fogler Library views itself as participating in a shift from the model of a research library based only on print information to one which encompasses digital information, according to Elaine Albright, dean of Cultural Affairs and Libraries. Digital information has become fundamental to research, teaching and business. Libraries are challenged to integrate digital information – not to treat the digital format as an idiosyncratic add-on, but instead to involve all levels of staff, from all specialties in its acquisitions, organization and management. Classic library principles provide a framework for knitting disparate digital library projects together and expanding the digital component of collections and services.

To meet the challenge, Fogler is forging new partnerships with communities of scholars and professionals to address common problems of information organization, access and use. Library staff are collaborating with a variety of partners to develop digital resources and access to them that advance teaching and scholarship both on and off campus. These collaborations use digital technology to identify and create resources that deserve a place in the digital library, and to provide a single, convenient, uncomplicated entry point to a carefully selected library of bibliographic, full text, image, spatial and other digital data.

One such project is Spatial Odyssey, an electronic publication which provides WWW access to the full text of GIS conference proceedings contributed by leading professional organizations involved with geographic information systems (GIS). The project is a collaboration with the NCGIA and the Library. Another project is the Archives Image Database which is a repository for digital surrogates of primary source material, finding aids and other research materials in two archival collections (Fogler Library Special Collections and the Maine Folklife Center) on Maine and Canadian Maritimes. The project provides network access to images of research materials from archival collections.

Electronic information technologies has placed the locus for a user's access to information outside the four walls of the library. The user at a workstation is connected to a local network, which is in turn connected to a state, regional, national and international networks. The user enters the library through a single gateway. As Fogler Library shifts collections and services to accommodate digital formats, so also does the shift encompass the creation of a new information system which will provide uniform and unified access to whole collections of information. Designed to meet the needs of users outside the library walls, the system is envisioned to provide resources located both locally and remotely, to include a complex of genres: bibliographic, text, spatial, image, etc., to be a single point of entry to resources, with navigational assistance and transparent connections to any resource selected by the user, and to encompass high quality support services.

Integrating Information Technology into the Curriculum

The Chemistry Department is among the many academic departments using multimedia and information technology initiatives in the classroom. Here, network computing is being integrated into general chemistry lectures and laboratories for

undergraduates. A computer-driven video projector installed in 316 Aubert allows faculty to use a variety of multimedia software to enhance their lectures. Animations of chemical phenomena and the use of spreadsheets and charting programs to do "what-if" presentations in real time will allow the lecturers to reinforce their presentations with dynamic new tools. The system is connected to the campus network and to the Internet, making a vast array of actual and developing resources available or accessible to the large lecture environment.

A second part of the project is focused on the Department's Inter-Chem-Net project which integrates laboratory instrumentation, a student-friendly data analysis package, and over 35 chemistry related tools into one software package. A computer cluster has been dedicated to the general chemistry laboratory. Lab results that students acquire on modern instrumentation such as UV-vis and FT-IR spectrophotometers are then available for them to analyze on these computers. Separating the data acquisition from the data analysis step allows more students to use this sophisticated and expensive instrumentation. The Inter-Chem-Net software is also available in 316 Aubert allowing lecturers to utilize the same software package that students use in their laboratory. Eventually, the Inter-Chem-Net software will be available over the campus network, allowing students to access chemistry tools and analyze their data at their own convenience.

The Growing Importance of Geographic Information and Global Positioning Systems

Geographic Information Systems (GIS) consist of a set of automated tools for collecting, retrieving, analyzing and communicating spatial data. Such systems involve not only the automated handling of map data and imagery, but also the automated handling of records and attributes of anything that can be tied to a geographical location on earth. The technology is applicable to remarkably diverse applications ranging from resource management to emergency response and disaster recovery, from political districting to forestry and marine studies, from mass marketing to urban infrastructure management, and from local studies through regional analysis to global change research.

The National Center for Geographic Information and Analysis (NCGIA) is an NSF-funded research center focusing on activities relating to GIS. NCGIA works as a consortium of the University of California at Santa Barbara, the State University of New York at Buffalo, and the University of Maine. Among the research initiatives of NCGIA researchers at UMaine is "Law, Information Policy, and Spatial Databases." The research focuses on access rights of citizens to publicly held information, intellectual property rights in spatial databases, privacy rights and principles, and liability in the use, sharing, and distribution of geographic information system data and analysis results.

Faculty from the Department of Spatial Information Science and Engineering contribute to the research undertaken at the NCGIA. From the Department also come research initiatives like the BASIN Project, in which students access to up-to-date mapping information about Maine obtained from the Maine Office of GIS in Augusta and numerous other sources- from data on human populations and shellfish beds to groundwater aquifers and land ownership. The long-term goal is to make the information available to the citizens of the state.

Uses of GIS and Global Position Systems (GPS) technology also include the creation and maintenance of spatial databases by the Department of Forest Management. The Department is home to the Maine Image Analysis Laboratory, a research facility for the application of satellite remote sensing and geographic information systems to natural resource management. ▲



Maine Perspective classified ads are published weekly and are free to faculty, staff and students at the University of Maine. Ads must be typewritten and include a telephone number. They will be published one week only unless otherwise specified. Send ads to: Maine Perspective Classifieds, Public Affairs. Ads must be received by 9 a.m. the Friday before they are to appear in the next week's issue.

FOR SALE

AUTOMOBILE: 1985 blue Chevy Camaro, V-6, 2.8 multi-port 5-speed, new tires, brakes and rotors, 160K, runs great, \$1,500 or BO. Call 843-5064 and leave a message or call Kim, 843-5168.

AUTOMOBILE: 1988 Toyota Camery, 4 door, 5-speed, many news parts, runs good. \$2,500. Call Julie at x1871.

AUTOMOBILE: 1991 Saab 900, gray, excellent condition. One owner, 90K miles, \$8,950 or b/o. Call 827-8499.

AUTOMOBILE: 1992 Diamante, great car, 4-door, automatic, cruise, dealer maintained, blue book value \$12,850. Serious inquiries only. Call John at 947-4778.

CLOTHES DRYER: \$150. Excellent condition. Used very little. Extra large capacity. Auto-Dry. Call 866-4382.

COMPOST, MULCH, WOOD CHIPS: Oct. 6 and Oct. 19, 8 a.m.-4 p.m., UMaine Office of Resource Conservation and Recovery (ORCR) will sell compost, mulch, and tree and shrub wood chips to the public at the ORCR's composting facility, Rangeley Road. Analytical lab test results available. Call Scott, 581-3049.

COMPUTER/IMAGewriter II PRINTER: CPU only, Mac LCII 4/80 with VRAM, expanded to 8 MB, System 7, MC68030 processor, Word 5.1, Excel 4.0, AfterDark screen saver—asking \$425 or make an offer. Call 827-5407 after 6 p.m. or on weekends.

GOLF CLUBS: Affordable, custom-made golf clubs. Many styles available. Full sets or individual clubs. Experienced club-maker. Also, regripping and some used sets in good condition. Call 732-5112.

HOUSE: Four BRs, 2 baths with large living, recreation and family rooms, kitchen with built-ins and all conveniences, finished laundry and office/computer rooms. Fireplace, hardwood floors, attached garage and porch. Baseboard hot water heat. Municipal water and sewer. New paint inside and out. Custom built for current owner with

many attractive features. Superb location within easy walking distance to schools, downtown, Stillwater River and Orono Land Trust. No brokers or buying agents. Call 827-2656, eves. for more info.

HOUSE: Orono, on 4 acres; energy efficient 5-year-young tri-level with 3+ BRs, 2 full baths, LR w/granite fireplace, oak kitchen, DR, rear PT deck and vegetable garden, large family room, laundry, heated 2-car garage. Two+ zone HWBB w/woodstove back-up, most rooms w/w carpeting, pine floor/FR, Peachtree windows and doors, architectural roof shingles, red cedar siding for low maintenance. Drilled well, flower gardens, mixed woods and brook w/wildlife. Essex Street, less than a mile from Pushaw Lake and 5-8 miles from UMaine, downtown Bangor and Mall. Assessed at \$136+K, offered at \$122,900. Call 942-2945.

HOUSE: Orono, 1,500 sq.ft., well-built, maintained and insulated home on 10 acres. Three BRs, 1.5 baths, hot-water baseboard heat (also wood stoves), complete and useable basement, washer/dryer, workshop, two-car garage, large deck, two balconies, new kitchen, new roof, house tested for radon, water supply tested, 4.5 miles from UMaine on outer Forest Avenue on school bus route. Has been valued at \$135K. Would like to sell semi-furnished. Call 866-4251.

HOUSE: Lagrange, 7-year-old ranch w/daylight basement, 25 minutes from campus, 7+ acres of land, 2-car garage attached to home by breezeway. Two BRs, 1 3/4 baths, sliding doors off DR to 12X16 deck. Anderson windows, paved drive, quality features throughout. Owners handle sale. Asking \$86K. Call 843-2684 after 6 p.m.

HOUSE: Two-3 BR, central chimney, antique cape in Old Town; completely renovated inside and out. Features exposed ceiling beams; pine floors and wainscoting; raised brick hearth with Vermont Castings woodstove; private, beautifully landscaped backyard with deck and arbor; garage with workbench and woodstove; close to all amenities. Must be seen; a steal at \$64,800. Call 827-3374 for information.

MOBILE HOME: 1983 Oxford 14x56, quality constructed with vinyl siding, shingled roof and T-111 skirting. In excellent condition. Includes attached mudroom, all appliances, shed, axles & tires. Can be moved or stay in quiet, low-rent park 10 minutes from campus. Moving in September. Must sell! Asking \$12,900. 827-2243. Leave message.

PRINTER: Epson Apex T-1000 dot matrix printer. Near-letter quality, built-in fonts, graphics capability. Good condition. \$40. Call 732-5112.

REFRIGERATOR: 21 cubic ft; good working condition; almond; \$125 or b/o. Call 827-5407 after 6 p.m. or on weekends.

TOOL BOX AND BEDLINER: For full-size truck. Black plastic with removable tray. Like new. \$75. Bedliner for Ford. Used less than one year. \$75. Call 827-7091.

WASHER/DRYER: Maytag washing machine & dryer in excellent condition.

\$275/pair. Will sell separately. Call 862-3266.

FOR RENT

APARTMENT: Charming Cape Cod, 2BRs, study, LR, appliances kitchen, full bath. Carpeted except for kitchen and bathroom. Off Stillwater Ave. Clean, quiet, bright and sunny rooms with large closets. Large backyard and off-street parking. Heated, W/S, parking, plowing and mowing included. \$495/month, references and security. No pets. Non-smoker preferred. Mature professional student or couple. Call after 6 p.m., 941-6442.

APARTMENTS: Bradley. Large, well-maintained 1-BR apartments in quiet country setting approx. 7 miles to Old Town/Orono. Rents start at \$300/month plus utilities. Applicant must meet certain income guidelines. 30-day lease and security deposit required. Call 827-7998 after 5 p.m.

APARTMENT: Newly built on a beautiful setting on Lucerne Lake. Portion of a family estate. Exclusively private. One bedroom furnished; large living area; furnished, fully equipped kitchen; heated garage; washer/dryer hook-up; satellite dish. Ideal location for four season outdoor enthusiast. Must see to appreciate. \$550/month, including heat, water and septic. Security deposit, annual lease. No pets. Call for an appointment to view. 843-6053 and leave a message.

HOUSE: Three-BR house, with finished basement and two-car garage, on a quiet street in an attractive Old Town neighborhood. Will lease for semester or academic year at \$650/month to University family. Contact Bob and Judy for more information, 326-9369, or FAX 326-8800.

ROOM: Sunny room for rent in Bangor victorian. Large house to be shared with UMaine professional. \$275/month, includes utilities, laundry, garden and off-street parking. Near EMMC, on bus line to campus. Prefer graduate student or professional. Call 990-0336 evenings.

WANTED

CARETAKER: Want to live in a beautiful year-round home on Pushaw Lake with water views on three sides? It is located on the Old Town side of the lake. A caretaker is needed until June 1997. Very low-cost living with all the creature comforts. Oil hot water heat with backup propane. Seven rooms and two baths. Every appliance available. A responsible single person, faculty or staff member of University preferred. Non smoker. Call 827-4093 or 827-4575 promptly if you are right for this opportunity.

CHILDREN FOR PSYCHOLOGY

RESEARCH STUDY: Looking for 4th- and 5th-grade children and their mothers to participate in an hour-long project that investigates children's emotional expressivity. The study is conducted in Little Hall and can be scheduled during evening and weekend times. Participants will be paid a small amount for their involvement. For more information, contact Dr. Janice Zeman, x2037, or Greg Young, 866-2788.

CHILD-SIZE VIOLIN: For a 5-year-old beginning Suzuki instruction. Call Margo, 866-7668.

HOUSE: Professional couple relocating to the Bangor/Orono area from Northern Utah looking for a temporary (as short as 1 month, the month of October) and/or long-term house sitting and or caretaking situation. We are very responsible; our current landlords live in Alaska and the rent is always on time. Outdoor lovers able to take care of routine maintenance. We will be arriving in Maine the last week of September and need to find something on or before Oct. 1. Contact Sue or Ben by e-mail at SBLATH@AOL.com.

HOUSE: For academic year, faculty couple seeks modern, quiet 2BR home in excellent condition near Orono. Prefer house partially furnished with garage. Call 581-2167 (daytime).

HOUSESITTING: Professional single woman seeking housesitting opportunity now or second semester. Non-smoker, no pets. Call 581-4035.

MACINTOSH COLOR DISPLAY: 14" monitor or larger. Call Gordon, 843-6959.

SERVICES

ALFOND ARENA: Clubs, dorms, sororities, fraternities—looking for something to do? Rent the Alford Ice Arena. Try broomball, pick up hockey or have a skating party. Cost: broomball equipment—\$25; skate rental—\$1/pair; ice rental—\$150/hour before 11 a.m.; \$100/hour after 11 p.m.

CHILDCARE: The Child Study Center on campus is now accepting enrollments for 3- to 5-year-olds for fall. Call x3080.

EDITOR/WRITER: Professional, efficient, reasonable. MLA, APA and Chicago Manuals of Style. Fifteen years of experience. Kay Retzlaff, 338-6468.

FREE

MAGAZINES: Bound volumes of *Science*: Vol 38 (1962) to Vol. 60 (1968). Location: zoology stockroom, 108 Murray Hall, 581-2557.

THE STUDENT ACADEMIC CONFERENCE TRAVEL FUND

The Student Academic Conference Travel Fund for undergraduate students will hold its first competition of the academic year. This fund serves undergraduate students who need financial assistance for travel to meetings/conferences of an academic nature. Applications must be submitted to the Office of Academic Affairs (209 Alumni Hall) by Oct. 4. Money will be awarded for travel taking place between Oct. 5 and Feb. 7. Applications can be obtained from Joan Day at the Office of Academic Affairs, 209 Alumni Hall, or by calling x1504.

Positions Available

The qualifications within the listings below are greatly abbreviated. In order to assess your background relative to the job and to submit the most effective application, contact the hiring department for more complete information.

To appear in the Maine Perspective, advertisements must be submitted to the Office of Equal Opportunity, 318 Alumni Hall, no later than noon on Wednesday. Guidelines for filling professional positions are available by contacting the Office of Equal Opportunity, x1226. A Request to Fill form must be approved before posting in Maine Perspective.

Assistant or Associate Scientist (title depending on qualifications and experience). Department of Forest Ecosystem Science position. Qualifications: M.S. or B.S. degree in forest sciences or related fields with appropriate technical skills, as well as supervisory and organizational skills. Travel, normally requiring a driver's license, is required. The position specifically calls for abilities to: design, maintain and repair field and laboratory apparatus; establish and maintain greenhouse materials and field plots; supervise student and non-student assistants; operate and maintain microcomputers, digitizers and various kinds of microscopes; use and understand statistical techniques and data acquisition and reporting. Effective communication skills are required. Experience with electron microscopy preferred. Salary Range: \$26,000-\$32,000. Deadline for Application: 10/11/96. Position to be Filled by: 12/1/96. Contact: Richard Jagels, Chair, Search Committee, Department of Forest Ecosystem Science, University of Maine, 5755 Nutting Hall, Orono, ME 04469-5755.

Assistant Professor of Landscape Horticulture, Department of Applied Ecology and Environmental Sciences. Half-time non-tenure track, academic appointment. Qualifications: Ph.D. in horticulture, plant science or a related discipline. Prior teaching experience is strongly desired as is an ability to inspire and motivate undergraduate students. A strong knowledge of herbaceous landscape plant materials is essential. Evidence of continuing research interest and a successful publication record is preferred. Deadline for Applications: 11/30/96 or until a suitable candidate is found. Contact: Professor William Mitchell, Landscape Horticulture Program Coordinator, 5722 Deering Hall, Orono, ME 04469-5722.

Assistant Strength & Conditioning Coach. Department of Athletics. Part-time/40 percent position. Qualifications: B.S. in exercise science or related field, current first aid and CPR certification, current and active member of the N.S.C.A. and must have a C.S.C.S. or preparing to sit for exam, strong computer skills, a working knowledge of NCAA and conference rules and regulations, demonstrated effective verbal and written communication skills. Salary: \$10,000. Review of Applications: Will begin immediately and continue until a qualified candidate has been identified. Contact: Jim St. Pierre, Head Strength & Conditioning Coach, 5747 Memorial Gym, Orono, ME 04469-5747.

Assistant Professor of Management, College of Business Administration. Full-time, tenure-track position in the field of organizational behavior and international management. Qualifications: Appropriate doctoral degree in business administration or offer substantial evidence that the degree will be completed by the time of appointment. Teaching experience is also desirable. In addition, all candidates must demonstrate an aptitude for successful teaching, research, and public service. Review of Applications: Will begin immediately. Date of Appointment: 9/1/97. Contact: Professor Carol Gilmore, Chair, Search Committee for Assistant Professor in Management, College of Business Administration, University of Maine, 5723 Donald P. Corbett Hall, Orono, ME 04469-5723.

SHOPPING TRIPS TO BOSTON'S QUINCY MARKET OR NASHUA'S PHEASANT LANE MALL

**Sponsored by the Classified Employee Scholarship Committee
SATURDAY, OCTOBER 26**

The bus to Boston and the bus to Nashua both leave promptly at 6 a.m., returning between 10:30-11 p.m. Buses depart from and return to the Cyr Bus parking lot, 160 Gilman Falls Ave., Old Town. Nonrefundable tickets: \$35 a person. Each bus limited to 46 passengers. Reserve seats by Oct. 1 by contacting Sharon Buchanan, 5719 Crossland Hall, 581-3439.

Graphic Designer/Production Coordinator, University of Maine Cooperative Extension. Full-time fiscal year professional appointment. Qualifications: Bachelor's degree in graphic arts/design, communication, fine arts or related field; extensive graphic design experience; illustration skills, both computer-based and manual; understanding of the printing industry and production methods; ability to manage multiple projects, producing quality results on schedule; effective communication skills; and ability to be self-directed and work independently as well as part of a team. This position will require occasional travel to off-campus locations and frequent meetings in other campus-based offices such as Printing Services. Salary: \$28,000. Deadline for Applications: 10/4/96. Contact: Sandra Vaillancourt, University of Maine Cooperative Extension, Room 103, 5741 Libby Hall, Orono, ME 04469-5741.

Vice Provost for Undergraduate Education. Full-time appointment, beginning Jan. 1, 1997 and continuing to June 30, 2000, with reappointment possible, pending a satisfactory performance review. The Vice Provost's responsibility is to ensure the quality of the University of Maine's teaching-learning environment including undergraduate classroom instruction, undergraduate advising, and retention of undergraduate students. This is the guiding principle of this position. Qualifications: Requires: Tenured faculty status at the University of Maine; significant experience in academic leadership and administration comparable to that of Department Chair, Academic Director, Associate Dean, or Dean; recent and extensive successful experience as an instructor of undergraduate faculty; and strong skills in group facilitation, as well as in oral and written communication. Additional Qualifications: A demonstrated commitment to academic excellence in undergraduate education; an understanding of the role of undergraduate education within the mission of the University of Maine; a demonstrated commitment to intellectual, scholarly, and creative activity; and a demonstrated commitment to cultural diversity and gender equity. Review of Applications: Will begin 10/11/96 and continue until the position is filled. Contact: Carole Gardner, 201 Alumni Hall, 581-1617, for full position announcement. Both applications and nominations are invited. Applicants should send a letter of interest, no longer than two pages, a two or three page resume, and the names, addresses, and phone numbers of three references.

The University of Maine does not discriminate on the basis of race, color, religion, sex, sexual orientation, national origin or citizenship status, age, disability or veteran status, and promotes affirmative action for women, minorities, persons with disabilities and veterans. Unless otherwise specified, the jobs are full-time and the address for the application information is: the contact person listed, department, University of Maine, Orono, ME 04469.

Cultural Affairs Committee Deadline for Proposals

The deadlines to submit proposals to the Cultural Affairs/Distinguished Lectures Series Committee are the last Fridays in September, November and March. Proposal guidelines and applications are available by contacting the President's Office, x1516.

ANDREW W. MELLON FELLOWSHIPS IN HUMANISTIC STUDIES

Eighty Mellon Fellowships will be awarded to promising students in humanistic studies who will begin their Ph.D. programs in the fall of 1997. Eligible fields include American Studies, Art History, Classics, Comparative Literature, Cultural Anthropology, English Literature, Foreign Languages and Literature, History, History and Philosophy of Science, Musicology, Philosophy, Political Philosophy, and Religion. The stipend for this one-year program will be \$13,750 plus tuition and required fees. Eligible students, either seniors or recent graduates who have not yet begun graduate studies, must request applications by December 9, 1996 and must submit completed applications by December 31, 1996. Candidates must take the Graduate Record Examination General Test by December 7, 1996. For brochures and additional information, contact Doug Allen, professor of philosophy and university representative for the Mellon Fellowships in Humanistic Studies, Department of Philosophy, The Maples, x3860.



IRIS, an easily searched, web-based database of more than 7,000 funding opportunities, is now accessible from all internet connections on campus. Faculty, staff, and graduate students seeking extramural support for professional activity are encouraged to visit IRIS at <http://www.grainger.uiuc.edu/iris>.

U.S. Department of Education awards fellowships for research abroad to faculty engaged in teaching about societies of Africa, East Asia, Southeast Asia and the Pacific, South Asia, the Near East, Central and Eastern Europe and Eurasia, or the non-USA Western Hemisphere. Deadline: Nov. 1. Grants for projects to strengthen instruction in international studies and foreign languages in the U.S. are also available. Deadline: Nov. 4.

State Justice Institute makes grants for innovative projects of education, research, demonstration, and technical assistance to improve

the administration of justice in State courts nationwide. FY97 priorities include improving public confidence in the courts, applications of technology, court financing, and improving the court's response to gender-related crimes of violence. Preliminary concept papers are due Nov. 27.

Environmental Defense Fund makes Environmental Science Minigrants of up to \$15,000 for research relevant to environmental policy development with regard to climate change, toxic chemicals, wetlands, water quality, environmental economics, and other topics of substantive interest to EDF. Deadline: Dec. 1.

American Heart Association/ Maine Affiliate makes grants for basic, epidemiological, and clinical research broadly related to cardiovascular function and disease. Deadline: Dec. 2.

Retirement Research Foundation seeks to improve the quality of life for older Americans by funding efforts to improve community-based and institutional long-term care, provide opportunities for older adults to engage in meaningful social roles, seek causes and solutions to significant problems, or prepare professionals and paraprofessionals to serve the elderly population.

National Science Foundation has issued new application materials to be used as of Oct. 1. For a copy, or for more information, call Research & Sponsored Programs, x1476.

Request for Proposals

UNIVERSITY OF MAINE - UNIVERSITY OF NEW BRUNSWICK EXCHANGE PROGRAM

We are now in year two of the fourth 3-year exchange program established between the University of Maine and the University of New Brunswick. Funds are available to support UMaine faculty, professionals and students in collaborative research, seminars, symposia and cooperative instruction with their UNB counterparts. Faculty and professional employees are invited to submit proposals for funding in academic year 1996-97. For an application form, contact Amy Morin, 581-4220. For further information and submission of proposals, contact Raymond Pelletier, Canadian-American Center, University of Maine, 581-4226.

IACUC APPLICATIONS AND MEETINGS

The Institutional Animal Care and Use Committee (IACUC) reminds investigators/instructors that no research, teaching, or testing activities using live vertebrate animals shall be initiated until the IACUC has approved a protocol for such use. Listed below are the due dates for receipt of applications and the actual meeting dates for the fall semester. Protocol review forms and copies of the University's Policy and Procedures for the Humane Care and Use of Animals are available from Gayle Anderson, Office of Research and Sponsored Programs, 424 Corbett Hall, x1498.

Applications Due	IACUC Meeting Dates
October 7	October 21
November 6	November 20
December 2	December 16

UMAINE TODAY NEWS AVAILABLE

UMaine Today is a daily e-mail service of UMaine's Department of Public Affairs. Intended to provide an overview of UMaine and related news of the day, UMaine Today is available to interested members of the University community. To subscribe to the service, send an e-mail message to listserv@maine.maine.edu and in the body of the message, write:

subscribe umtoday

Each day's message, which is sent at approximately 3:30 p.m., is also posted to the First Class BBS. For more information, or help in subscribing, call Joe Carr, Public Affairs news coordinator, x3571.

RHODES SCHOLARSHIP APPLICATIONS AVAILABLE

Rhodes Scholarship application forms and information are available from Mac Hunter, Department of Wildlife Ecology, x2865.

What's Ahead

▲▲▲▲▲▲▲▲▲▲▲▲▲▲▲▲

**IT'S ABOUT TIME AGAIN:
TEACHING HISTORY IN MAINE**
October 4

**MENTAL ILLNESS
AWARENESS WEEK**
October 7-11

**READING STEPHEN KING:
ISSUES OF STUDENT CHOICE,
CENSORSHIP AND THE PLACE
OF POPULAR LITERATURE
IN THE CANON**
October 11-12

**DEDICATION OF THE SCHOOL
OF PERFORMING ARTS AND
CLASS OF 1944 HALL**
October 18

Maine Perspective



University of Maine
Maine Perspective
Department of Public Affairs
5761 Public Affairs
Orono, Maine 04469-5761